



Community Alliance with Family Farmers

COVID-19 On-Farm Food Safety Best Practices & FAQs

Alisha Strater, MA
Farm Service Coordinator
alisha@caff.org



**United States Department of Agriculture
National Institute of Food and Agriculture**

This material is based upon work that is supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, under award number USDA-NIFA-FSMA-005777.



Disclaimer

This information is provided by CAFF in good faith, but without warranty. It is intended as an educational resource and not as advice tailored to a specific farm operation or a substitute for actual regulations and guidance from FDA or other regulatory agencies. We will not be responsible or liable directly or indirectly for any consequences resulting from use of information provided in this webinar and/or documents or resources suggested in this webinar.

Please check with local health authorities (often county public health departments) for any unique requirements at the local level you should be aware of.

This presentation is based on the current information we know of as of April 8th, 2020.

The Bigger Picture, Ecosystem disruption and pandemics

- **Ecosystem disruption and pandemics**
- There are many examples of how ecosystem disruption causes diseases and outbreaks, as described in depth in some early warning reports, such as the [UNEP report, 2016](#). Most pandemics in fact, including HIV/AIDS, Ebola, West Nile, SARS, Lyme disease and hundreds more, have their roots in environmental change and ecosystem disturbances. These infectious zoonotic diseases originate from animals, wild and domesticated. These diseases are magnified through the erosion of ecosystem health, deforestation, biodiversity loss, ecosystem destruction and the removal of essential, natural, protective barriers.
- *COVID-19 represents a new symptom of the same underlying issue. Industrial agriculture's invasiveness continues to stretch into new frontiers. The extent of biodiversity and habitat loss, deforestation, and replacing complex ecosystems with monotonous landscapes of industrial monocultures, genetically uniform plant and animal species, and segregated and concentrated human settlements, constricts the life-functions of the Earth and greatly reduces human resiliency.*
<https://www.acbio.org.za/en/monoculture-effect-and-covid-19>

Small, biodiverse, regenerative agriculture is part of the solution

- *Biodiverse, smallholder food and farming systems; traditional communities and their knowledge systems; respect for farmers' rights; social and ecological justice; agroecology and food sovereignty; and **keeping wild spaces intact**, must underpin this transformation.*
- *The work we do on our farms is part of the solution building toward localizing the food system and supporting regenerative stewardship practices that encourage resilience and biodiversity in our ecosystems*

“We are caught in an inescapable network of mutuality, tied in a single garment of destiny. Whatever affects one directly, affects all indirectly.” -MLK

We must now deglobalize the food system which is driving climate change, disappearance of species, and a systemic health emergency.

- The planet’s health and our health are non-separable...We can be linked worldwide through the spread of disease like the coronavirus when we invade the homes of other species, manipulate plants and animals for commercial profits and greed, and spread monocultures .
- Or we can be connected through health and wellbeing for all by protecting diversity of ecosystems and protecting the biodiversity, integrity, self-organization (autopoiesis) of all living beings, including humans.

-from Vandana Shiva’s “Ecological Reflections on the Corona Virus” <https://medium.com/post-growth-institute/ecological-reflections-on-the-coronavirus-93d50bbfe9db>

What is the likelihood of transmission via food?

- At this time there have been zero cases of COVID-19 from food or food packaging.
- CDPH and the Governor issued joint letter that they are not aware of any reports of COVID-19 being transmitted by food or food packaging.

<https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/COVID-19/Coronavirus%20Disease%202019%20and%20Food%20Industry.pdf>

How is COVID-19 spread?

- Through respiratory droplets and touching contaminated surfaces and then touching your eyes, nose, and/or mouth

Where can I find reputable websites with COVID-19 information?

- **World Health Organization:** https://www.who.int/news-room/q-a-detail/q-a-coronaviruses?cmp=EMT-1004395-5-1-200-1111110-GLBL-US-EN-CCMZNOTIZCOVID0&ET_CID=764025&ET_RID=2909587&LINK=WHO_CORONAVIRUS
- **FDA Website on food safety & COVID-19:** <https://www.fda.gov/food/food-safety-during-emergencies/food-safety-and-coronavirus-disease-2019-covid-19>

Where can I find clear information about what jobs are considered essential right now?

- You can find a detailed list of food and agriculture related essential jobs listed on the Cybersecurity and Infrastructure Security Agency:
<https://www.cisa.gov/publication/guidance-essential-critical-infrastructure-workforce>

What if one of my employees is stopped while they are driving to work? Is there a government issued certificate I can give employees to prove they are an essential worker?

- Not at this time. You can use one of the templates such as this one and provide a print out of this for each of your employees.
<https://docs.google.com/document/d/1WuQP6US-Jpn5m5RBkzyfy6Un22ZAmAwD0mU5ud1ggng/edit>

Are there any new regulations farmers should be aware of for COVID-19 on farms?

- At this time there are no new regulations specific to COVID-19 for produce farms.
- All produce farms nationwide should be aware of and in compliance with the Federal Food Safety Modernization Act (FSMA). CAFF has numerous resources on that regulation, including webinars found here: <https://www.caff.org/food-safety/food-safety-webinars/>
- Direct-market farms in California should be following good agricultural practices. https://www.cdfa.ca.gov/is/i_&c/sffsg.html

What are best practices for farm worker safety?

- Designate one person for every crew on your farm to be the food safety lead
- Train all your workers on:
 - What COVID-19 is and how it is spread
 - Symptoms of COVID-19
 - How to prevent the spread of COVID-19 if you are sick
 - Importance of frequent handwashing (20 seconds minimum)
 - Hand sanitizer is not as effective as handwashing, but can be used if handwashing is not available
 - Coughing and sneezing practices into your elbow or tissue
 - How to safely and correctly use cleaners, sanitizers, and disinfectants
 - Importance of maintaining social distancing
 - Not coming to work if they are sick and/or live with someone that is sick w/COVID-19 (or suspected)

Resources from Cornell:

<https://smallfarms.cornell.edu/resources/farm-resilience/#resources-links>

CDC online printable resources:

<https://www.cdc.gov/coronavirus/2019-ncov/communication/print-resources.html?Sort=Date%3A%3Adesc>

Video:

https://youtu.be/nEzJ_QKjT1

Portable Hand washing station



Wash station should have:

- Water*
- Single use paper towels
- Liquid soap
- Grey water catchment
- Closed trash can
- <https://blog.uvm.edu/cwcallah/2020/06/09/improving-handwashing-stations/>
- https://safety.dl.umn.edu/sites/g/files/pua3146/f/media/handwashing_station_instructions.pdf

Steps employers should take to prevent COVID-19 spread:

- Send employees sick w/respiratory symptoms home/to medical care immediately
- Encourage sick workers to stay home by providing sick leave
- Make hand-washing stations readily available and stocked
- Frequently clean and disinfect commonly touched surfaces on the farm
 - Use products on the EPA COVID-19 list <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>

Promote physical distancing (6+ feet between workers)

- Change tasks on the farm to have reduced number of workers in areas
- Stagger work shifts so people can spread out
- Divide crew into 2-5+ small crews that work in teams
- Create a drop off spot for farm package deliveries
- Installing shields or barriers, such as plastic, between farmworkers, when a 6-foot distance between farmworkers is not possible or add visual cue marks in employee break/work areas to support social distancing between farmworkers.

What should I do if one of my workers tests positive for COVID-19?

- Inform other employees that someone tested positive
- Provide this CDC 1-pager to employee and tell them to follow it
<https://www.cdc.gov/coronavirus/2019-ncov/downloads/sick-with-2019-nCoV-fact-sheet.pdf>
- Contact your local health department and let them know of the positive test result. They will have info on next steps.
- Determine what areas the person that tested positive spent time on the farm and clean & disinfect all non-porous surfaces they may have come into contact with.

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

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

- ❑ Determine who else on crew was in close contact for a prolonged period of time with the person that tested positive for COVID-19

Close contact = within 6 feet of a person

Prolonged period of time = CDC doesn't have a definition yet, but saying exposure of 10 or more minutes is prolonged

Other factors to consider: was the person that tested positive exhibiting symptoms (coughing, fever, etc) when they were around other people? Was anyone wearing masks?

If a worker at my farm tests positive for COVID-19, should I close my farm?

- It depends on local and state health department protocols that are based on the level of community spread in your area. Contact local officials for guidance.

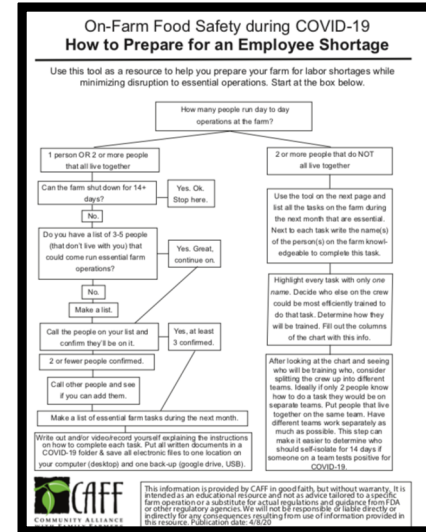
<https://www.fda.gov/food/food-safety-during-emergencies/food-safety-and-coronavirus-disease-2019-covid-19>

If my worker at my farm has been exposed to someone who has tested positive within a 48 hour before or during symptoms what protocol should I follow? The exposed worker should:

- Wear a mask at all times and practice social distancing
- Pre screen their temperature before they return to work and consistently monitor for any changes
- Disinfect and clean workspaces and tools routinely, particularly those that are shared

What steps can I take to minimize a labor shortage if one or more of my employees tests positive for COVID-19?

- ❑ Divide personnel up into different crews so if one person tests positive it's easier to determine what other people they may have exposed (keep family members on the same crew)
- ❑ Train, provide supplies for, and encourage frequent handwashing and sanitizing of non-porous surfaces
- ❑ Encourage employees to minimize contact with other people outside of work
- ❑ Require employees that are able to wear cloth masks while working to do so



What steps can I take to minimize the effects of a labor shortage?

- Make a list of all key tasks that need to be done in the next month
- Categorize each task as: essential, could be modified, can wait
- Next to every essential task write the name(s) of the people on your crew that know how to complete the task
- Every essential task that there's only one name next to, determine who the next best person to do the task would be and have the person that knows how to do the task train that person & create a written SOP (instructions) on how to complete the task

I can't find hand sanitizer. Are there instructions on making it?

- University of Florida Extension has this guide: <https://edis.ifas.ufl.edu/fs335>
- WHO has this guide: [https://www.who.int/gpsc/5may/Guide to Local Production.pdf](https://www.who.int/gpsc/5may/Guide%20to%20Local%20Production.pdf)

What supplies should I have in my handwashing station?

- Liquid soap, potable water, single use paper towels, garbage with lid to dispose of towels (ideally foot operated)

Should employees wear gloves?

- Gloves are never a replacement for proper handwashing and social distancing practices. Make sure you have enough gloves for farm activities that require it (mixing chemicals, mechanic work) before wearing them for other activities.

Should employees wear cloth masks?

- New CDC Guidance recommends all people that are able to wear cloth masks in public, especially in areas of high community transmission.

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

- CA Dept. of Public Health says to check at the county level on whether cloth masks are required in public places.
- Even when wearing cloth masks employees **MUST** make sure to frequently wash their hands, avoid touching face, practice physical distancing, and stay home when not at work.

<https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Face-Coverings-Guidance.aspx>

- Cloth masks should be washed daily in hot water, with detergent, and dried.

What are harvest best practices?

- Everyone washes hands prior to starting and often throughout harvest
- Consider providing each employee with their own harvest knife/snips

Johnnys - <https://www.johnnyseeds.com/tools-supplies/harvesting-tools/harvest-knives/?start=0&sz=18>

Harris - <https://www.harriseseeds.com/collections/harvesting-supplies>

- Buy knife sheaths that are plastic or machine washable so knives can be stored individually and the sheath can be cleaned and sanitized

<https://www.harriseseeds.com/collections/harvesting-supplies/products/41189-plastic-knife-sheath>

<https://www.harriseseeds.com/collections/harvesting-supplies/products/41025-nylon-knife-sheath>

- Implement equipment cleaning and sanitizing of surfaces touched frequently (e.g. harvest knives, postharvest wash equipment, cooler handles, etc)

What should employees wear while harvesting?

- Clean clothes must be worn daily
- Determine your farm's policy on cloth mask wearing
- If cloth masks are worn they should be machine washed daily
- Determine your farm's policy on glove use - remember glove use does NOT replace handwashing
 - Reusable gloves (cloth ones) should be machine washed daily
 - Single use gloves must be replaced if they get a hole, after breaks, and after employees use the restroom
- Do NOT buy N95 or surgical masks for employees unless they are doing a farm task that requires it (cleaning animal shavings, at risk for Valley Fever, applying chemicals)

Farm Sanitizer Use

- Sanidate 5.0
 - PAA & Hydrogen Peroxide product
 - Allowed for organic farms
 - Can be used to sanitize non-porous surfaces
 - Can be used in postharvest wash water
- Suppliers:
 - Check w/your current ag products supplier
 - Johnny's Selected Seeds
 - Arbico Organics online
- Sanitizer use requires following instructions and only using products in ways that are on their label
 - We will talk more about this on future slides



What's the difference between cleaning, sanitizing, and disinfecting?

CLEANING

Remove dirt and other particles from the surface by using a soap (detergent) and water to wash the particles away.

SANITIZING

After a surface is cleaned, you apply a sanitizer to lower the # of germs on the surface to a safe level by public health standards.

DISINFECTING

After a surface is cleaned, you apply a disinfectant to kill germs on surfaces.

How do I sanitize a non-porous surface?

- First, make sure you adequately clean (with soap and water) the surface and remove surface dirt, etc.
- Find a sanitizer product that's approved for use on food contact surfaces.
 - Go to the Produce Safety Alliance resources webpage to download the free excel tool that lets you filter for sanitizers you can use in farming/food contact surfaces.
<https://producesafetyalliance.cornell.edu/resources/general-resource-listing/>
- Make sure to mix the product according to the label.
- Apply the product according to instructions.
 - E.g. Sanidate 5.0 says for it to sit on the surface for at least 1 minute contact time.

When should I sanitize surfaces?

- This is a general good agricultural practice that applies to various circumstances. In general, when there's a possible hazard you should sanitize that surface (e.g. farm stand counters, credit card processors, packing tables, wash tank surfaces).

How do I disinfect non-porous surfaces?

- First make sure to adequately clean the surface so it's free of dirt, etc.
- Find and get product(s) on the EPA N-list (those are approved for use against COVID-19). Currently, NO products are actually labeled to kill COVID-19, it's too early for testing to have been completed and products approved. <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>
- Make sure to mix the product according to the label.
 - E.g. Clorox Bleach 6% for disinfecting mix $\frac{3}{4}$ C per gallon of water and apply to a surface for a minimum contact time of 5 minutes

When should I disinfect surfaces?

- When it's likely or known that a surface is contaminated (e.g. bodily fluid on surface, CSA boxes returned from an area with known illness)

Are there specific wash/pack guidelines to ensure customer safety?

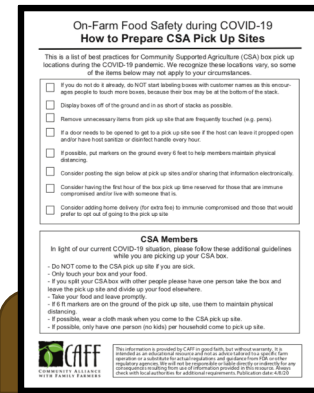
- It's impossible for a farm environment to be zero risk.
- It's important to put practices in place to reduce your risks.
 - Employee hygiene, handwashing
 - Cleaning and sanitizing harvest equipment
 - Cull any crops with visible bruising or decay (in the field) as those are breeding grounds for contamination
 - Washing, packing, and storing crops under appropriate conditions

What are packaging best practices?

- In general, continue following good agricultural practices.
 - Store packaging indoors or covered and off the ground
 - Do not let animals touch it
- If you reuse packaging (e.g. CSA boxes) you should consider:
 - 1) Discontinuing reuse of packaging until after pandemic is over
 - OR
 - 2) If reusing packaging make sure to sanitize box plus consider putting a new plastic liner inside box that food is packed into
<https://www.cogentsupplies.com/agriculture>

What are best practices for CSA delivery sites where people pick up their boxes?

- Consider adding home delivery (for extra fee) for immune compromised and those that would prefer to opt out of going to the pick up site
- If you don't already label boxes, DON'T start because this encourages people to touch more boxes as they get to theirs from the bottom of the stack
- Remove unnecessary items from pick up site that are frequently touched (e.g. pen)
- If a door needs to be opened to get to pick up site see if host can leave it propped open and/or have host sanitize handle every hour
- Post signs that remind people to follow these practices:
 - Do not come to the drop site if you are sick.
 - Only touch your box and your food.
 - Take your food and leave promptly.
 - If possible, wear a cloth mask when you come to the CSA pick up site.
 - If possible, only have one person (no kids) per household come to pick up



What are best practices for farm stands or CSAs that do on-farm pick up?

- Provide a handwashing station at the place where people enter the pick up area and require everyone to wash their hands before entering.
- Do not allow sick customers or employees to be at farm stand or CSA pick up site.
- Pre-package CSA shares and farm stand items
- Limit the number of people that can come into the pick up area at a time, determine how many by putting markers on the ground 6 feet apart.
- Consider hanging plexiglass down in front of areas where produce is displayed so people can point to and tell you what they want (and see it) but not touch food.
- Consider hanging plexiglass down in front of the area where people pay so there's a barrier where the customer talks to the person checking them out.
- Consider having employees wear cloth masks and gloves.
- Have one employee only complete payment and stay at that station have another person(s) helping customers and packing their orders.
- Clean and sanitize non-porous surfaces (tables, plexiglass, payment processor)
- Encourage people to come by themselves and without kids.
- Do not use table cloth tablecloths as they are difficult to sanitize (while they're in use)

What can we do to increase customer confidence?

- Educate! Share the USDA fact sheet listed below that explains to consumers to wash their produce under cool water and do not use soap.
https://www.fsis.usda.gov/wps/wcm/connect/2ceaa425-0488-4e86-a397-e2d9c470fc4a/Washing_Food.pdf?MOD=AJPERES
- Educate! There's no evidence eating produce can give you COVID-19. Thankfully, this is not a foodborne virus!
https://agsci.oregonstate.edu/sites/agscid7/files/wrcefs/wrcefs_retail_produce_food_safety_covid-19_flyer_032420.pdf
- Educate! Share the CDPH and Governor's letter on how there is no evidence COVID-19 is transmitted through food and food packaging.
<https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/COVID-19/Coronavirus%20Disease%202019%20and%20Food%20Industry.pdf>

How do we reassure customers that CSA boxes are safe?

- All of the above education plus be transparent with customers about procedures you have in place (e.g. cleaning and sanitizing each box that's reused, using a new plastic liner, etc).

Can a farm be safe during a U-Pick?

- Possibly. Check with local officials to make sure u-pick is allowed. Make sure to follow very strict handwashing requirements, post signage on not allowing sick people, control picking area to maximize physical distancing, pay attention to any new guidance as it comes out.
https://foodsafety.ces.ncsu.edu/wp-content/uploads/2020/03/U-Pick-Farms_COVID-19_031620.pdf?pwd=no

How can I keep delivery drivers safe?

- Do not have your delivery drivers sit in a truck with someone else closer than 6 feet from them.
- Contact locations via phone/email ahead of time and see if they have any new delivery instructions during the pandemic. Communicate those new delivery instructions to driver before they leave on route.
- Provide driver cloth mask, gloves, hand sanitizer, and bottle of disinfectant (see earlier info on that) so they can spray down surfaces (steering wheel, etc) as they go about their route.



On-Farm Food Safety Experts throughout California

Statewide

Alisha Strater, CAFF

- Alisha@caff.org, 510-336-4024

Donna Pahl Clements, Southwest Regional
Extension Associate, Produce Safety Alliance

- dmp274@cornell.edu, 909-552-4355

Urban Ag

Jennifer Sowerwine, UC Assistant Cooperative
Extension Specialist

- jsowerwi@berkeley.edu, 510-207-2692

Value-Added Products

Erin DiCaprio, UC Assistant Cooperative Extension
Specialist

- eldicaprio@ucdavis.edu

Fresno & Surrounding Counties

UC Small Farms

Ruth Dahlquist-Willard:

rdahlquistwillard@ucanr.edu

Jacob Roberson: jtroberon@ucanr.edu

San Benito, Santa Clara, and Santa Cruz Counties

Aparna Gazula, UC Small Farms Advisor

- Email: agazula@ucanr.edu
- Phone: 352-682-7294

San Diego Area

Stepheni Norton, CAFF San Diego Regional
Food Safety Lead

- Email: Stepheni@caff.org

Break Out discussion questions:

- **Shifts On Farm-** What major changes have you had to make as a result of this Pandemic and how are those changes effecting the overall farm? What long term changes do you for see coming out of this period of time?
- **Food Safety-**Did you have a food safety plan already in place before Covid-19 and how did it help/what did you have to modify to make it work? Can you offer any strategies or advice that has been helpful to other farmers here about what has worked?

Additional Questions:

- **Labor-**What shifts have you had to make around labor on the farm specifically? Do you have training in place to help workers understand changing protocols and issues around food safety during Covid-19 and beyond?
- **Marketing-**What pivots have you had to make in terms of marketing on your operation and how has this affected the viability of your farm this season and beyond?

Search...



ABOUT

[PROGRAMS]

FARM RESOURCES

EVENTS

BLOG

MEMBERSHIP

Farm to Market »

Policy »

Climate Smart Farming »

Food Safety »

Disaster Resilience »

Our Food Safety Program

Food Safety Plan Templates

Food Safety Webinars

Podcast

Food Safety Consulting Services

Food Safety Resources

