



FAQ about COVID-19 for fruit and vegetable farms, gardens, and markets

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These Frequently Asked Questions are intended to provide guidance and information about COVID-19 to produce farms, community gardens, farmers' markets and other agricultural producers. For a more general overview of COVID-19 FAQs, please see the [Centers for Disease Control FAQ page](#). This page is meant to accompany UMN Extension COVID-19 response templates for [fruit and vegetable farms](#) and community gardens.

Disclaimer: the information in this document is current as of 4/29/20. New research and information related to SARS-Co-V-2 is coming out regularly, and this FAQ will be updated to reflect changes.

1. What are the most important steps farmers can take to minimize the spread of COVID-19 on farms?

SARS-Co-V-2 (the virus that causes COVID-19 illness) is a respiratory virus that spreads primarily through droplets during person-to-person contact. According to guidance from the [CDC](#) and other public health organizations, the most important actions you can take to minimize the spread of the disease are the following.

1. **Physical distancing** - maintain at least 6 feet between all staff, volunteers and visitors to minimize person-to-person spread of the virus.
2. **Don't work if you are sick** - Know the symptoms like fever, cough, body aches, shortness of breath ([see CDC](#)) and do not come to the farm if you have any of these symptoms.
3. **Handwashing** - Wash your hands before work and often while you work for at least 20 seconds.
4. **Use good personal hygiene** - sneeze into a tissue - cover your cough, and wash your hands after sneezing or coughing.
5. **Clean and sanitize** - the high-touch areas on the farm including tools and surfaces at least daily to minimize the spread via surfaces.
6. **Wear a cloth mask** - if possible to prevent the spread of the virus, since you might not have symptoms. Masks can cause irritation; take care to avoid touching your face.

2. Can COVID-19 be spread on food or food packaging?

According to the [CDC](#), [FDA](#) and others, there is currently no evidence of food or food packaging being associated with transmission of SARS-CoV-2 virus. It is a respiratory virus, and the primary transmission route is person-to-person contact via droplets that are expelled when an infected person coughs, sneezes or breathes in the air near another person. That is not to say that food or food packaging could *never* transmit the virus, but it is not the primary or most likely way that someone would contract the virus.

3. What do we know about how long the virus remains on surfaces? Can we use waxed cardboard boxes?

[Research recently published in the New England Journal of Medicine](#) finds that in laboratory conditions, SARS-CoV-2 can persist on surfaces like plastic and metal for up to 3 days, cardboard up to 24 hours, and in the air for up to 3 hours. Remember that these are in controlled conditions, and in a typical environment the virus most likely degrades within a few hours. The virus is a lipid-enveloped virus, meaning it is coated with a fat-like substance that makes it relatively easy to inactivate with soaps, disinfectants and alcohol. Basic cleaning and sanitizing routines will likely be sufficient to inactivate the virus, should it be on your farm or on your totes, tools or other surfaces.

Waxed cardboard boxes will be more challenging to sanitize compared to non-porous options such as plastic. Some farms are using plastic liners in their waxed boxes this year to reduce the touching of produce after it is packed. Another option is to leave boxes untouched for a number of days after you get them back in case the virus is present on the surface. Remember though, dirty boxes can carry other foodborne pathogens like *E. coli* and *Salmonella* from cross contamination that occurs when they are out of your control. Discard boxes when they get too soiled or if they were in contact with someone with a known COVID-19 diagnosis.

4. What sanitizers are approved to inactivate the virus that causes COVID-19 on surfaces?

There are not yet any sanitizing products specifically labeled for use on the SARS-CoV-2 virus, though many are currently being researched for effectiveness. The EPA ["List N"](#) is the list of approximately 370 disinfectants that are approved for use because they are effective against other human coronaviruses or harder to kill organisms. The best way to use this tool is to search the EPA registration number on a label, since products go by many names in the marketplace.

In general, use the **hard surface sanitizing rate** on the label for your everyday preventative sanitizing schedule for surfaces, tools and "high-touch" surfaces. This is generally a lower rate and shorter wet contact time than the disinfectant rate. Use the

disinfectant rate on the label if you have a confirmed COVID-19 case on the farm or in the garden. This is often a higher rate and longer wet contact time. Some options for sanitizing and disinfecting hard surfaces for coronavirus include:

- Household bleach: [Ultra Clorox Regular Brand bleach](#) (6.0% sodium hypochlorite product) is approved for use against the virus. The hard surface sanitizing rate is 200 ppm, or about 1 T per gallon. The [CDC disinfection](#) recommendations state that bleach should be mixed at a rate of 5 T per gallon, or 1000 ppm if there is a known COVID-19 case on the farm.
- VigorOx SP-15: [VigorOx SP-15](#) (15.0% peroxyacetic acid and 10.0% hydrogen peroxide product) is approved for use against the virus and OMRI-approved for organically certified operations. [The label](#) says that the surface sanitizing rate is 1 oz. per 16 gallon of water (85 ppm of PAA) with a contact time of 1 minute.
- Sanidate 5.0: [Sanidate 5.0](#) (5.3% peroxyacetic acid and 23.0% hydrogen peroxide product) is a OMRI-approved disinfectant product made by BioSafe Systems. Sanidate 5.0 is not currently listed on the EPA's List N. However, BioSafe recently released a press release stating that Sanidate 5.0 has been tested and shown to be effective against human coronaviruses at a rate of 1 Fl oz per gallon, or about 400-450 ppm with a 10 minute wet contact time. The company is currently applying for a supplemental label to include the efficacy on human coronaviruses, and when that approval is granted it will be listed on the List N.

5. What surfaces should we clean and sanitize to minimize the spread of coronavirus on the farm?

Your farm might already have a cleaning and sanitizing routines for food contact surfaces. Sanitizing for COVID-19 might not be significantly different from those current procedures, with the addition of extra attention to "high-touch" surfaces that many people touch daily. Use the hard surface sanitizing rate of your disinfectant on these "high-touch" surfaces at least daily. Some of these "high-touch" surfaces on the farm or in the garden might include:

- *Field: vehicle door handles, steering wheels, stick shifts, PTO handles, shared tools*
- *Pack shed: dolly handles, cooler handles, door handles, light switches, scale buttons*
- *Greenhouse: watering wand, germination chamber handles, door handles, vent openers*
- *Office: keyboard, mouse, iPad, phones, chair armrests*
- *Restrooms: toilet handles and seats, faucet handles, door handles*
- *Tools and equipment: Sorting tables, harvest totes and buckets, scales, clippers, knives*
- *Other: buttons, pads and touch screens used by staff or volunteers*

Remember: you cannot sanitize a dirty surface! Clean a surface well *before* you apply the sanitizer if the surface has any visible soil. Develop a cleaning and sanitizing SOP (Standard Operating Procedure) that describes how you clean and then sanitize surfaces so that employees know the steps to take. A SOP is in essence detailed instructions that describe how you make the sanitizing solution and do the cleaning. Keep a log sheet documenting that your processes have been completed so you have a record of your actions.

6. What about hand washing and hand sanitizer?

Handwashing is a critical step to reduce the transmission of the virus and other illnesses on the farm and among your crew and visitors. Employees and visitors should wash their hands before harvesting or washing produce, after sneezing or coughing, after using the restroom, after eating and before putting on gloves. Make handwashing easy by putting hand washing stands at key locations around the farm, such as in the field, near restrooms and near packing facilities. Make sure that you are monitoring stations to ensure they are well stocked with soap, paper towels, potable water and a garbage can. Hang signs to remind people to wash their hands well.

Alcohol-based hand sanitizer is effective against the virus, but [it is not a substitute](#) for hand washing, since it is not effective at killing viruses when hands are dirty. You can use sanitizer if you choose to when hand washing is not possible, such as when your delivery driver is making deliveries and on the road, but during normal farm and garden operations hand sanitizer should not be a replacement for handwashing as it will not be effective if hands are soiled.

The handwashing stand can be a table or the back of a pick-up or van with a water container with a spigot (e.g. an Aqua-Tainer or a cooler). The water container should have a continuous-flow valve, meaning it flows down without needing to be pressed, allowing you to rub your hands together while being washed. In a community garden, if you have a toolshed, you can store these materials in the toolshed overnight and assign someone to refill the water container each morning. If you do not have a toolshed, some garden leaders have suggested partnering with a neighbor, who could potentially keep the water container overnight if you are worried about theft.

[Video: How to build a hand washing station for \\$20](#)

[Fact sheet version](#)

7. Are gloves required?

If you want to wear gloves you can, but they are not required and are not a replacement for proper handwashing. Change disposable gloves if they become contaminated or torn, and between tasks. Wash reusable gloves after each day. Gloves can spread contamination just as well as a hand can, and may also provide a false sense of protection that could cause the wearer to slip up on other precautions such as hand washing and

regular change-out. If a worker who is handling produce chooses to wear disposable gloves, make certain that they know to wash hands well before putting them on and that they must change them when they become soiled, between tasks or any time they have reason to think the glove might have become contaminated.

8. When should farmers or gardeners wear masks?

The [CDC](#) and the [Minnesota Department of Health](#) now recommend that all Americans wear cloth masks in public. A significant number of COVID-19 carriers are asymptomatic, meaning they show no symptoms of the disease. These individuals might come to work because they feel healthy, and transmit the virus to non-carriers. Wearing a mask helps prevent transmission by blocking droplets when we speak, sneeze, cough or breathe.

One risk of wearing a mask is that they cause discomfort, especially if a person is working hard and sweating. This may cause the wearer to readjust, and in the process of doing so touch their face. If you are touching your face more frequently due to the mask, you might consider not wearing the mask.

A second risk when wearing a mask is that masks may provide a false sense of protection, allowing people to slip-up on other precautions such as physical distancing. Masks made from fabric do not offer the same level of protection as a NIOSH certified N95 respirator. Take care to maintain physical distance while wearing the mask.

Based on these risks, it may not be necessary to wear a mask at all times on the farm, such as while doing field work. Consider situations where "community-based transmission" may be more likely, such as working in a more confined pack shed, or interacting with customers on the farm or at markets.

If using a mask, wash your hands before putting it on and taking it off. Wash the masks daily if they are made of washable material (not disposable). Homemade/fabric face coverings should be washed regularly using normal laundry detergent and the warmest water setting, if possible. Do not touch your face while wearing it, and if you need to re-adjust, wash your hands fist. The [CDC has guidelines](#) here on how to properly wear and wash a cloth face covering.

9. What steps should we take if a worker or gardener becomes sick with COVID-19?

Sick employees should not come to work. The [CDC recommends](#) ensuring that all sick employees stay home and self-quarantine. [According to the CDC](#) person can discontinue self quarantine when ALL of the following have been achieved:

- 1. They have not had a fever for at least 72 hours (3 full days) without the use of medicine that reduces fevers**
- 2. All symptoms including coughing have improved**
- 3. At least 7 days have passed since symptoms first appeared.**

You are not required to report sick employees, but the Minnesota Department of Health is available to answer questions and help you troubleshoot: MDH at 651-201-5414. Healthy employees are allowed to continue working, as long as you have safety measures in place to reduce the likelihood of transmission.

If anyone on the farm gets sick, the farm manager should work with the whole farm crew to identify potential risks to other employees. Try to identify whether any crew members have been in close contact with the sick person, and ask all crew members to take extra precaution and monitor themselves closely for signs of illness. Now that testing is becoming more available, consider encouraging employees to get tested if they have been in close contact with a sick employee or person.

- Minnesota's testing locations [are listed here](#).
- See the [CDC's guidance on reducing transmission between employees](#) for a comprehensive review of recommendations.
- Cornell's Institute for Food Safety has developed a helpful [decision making flow chart](#) and a [Standard Operating Procedures template](#) on this topic.
- Minnesota Department of Agriculture recently developed the guidance document [Preparing for Sick Agricultural Workers During COVID-19](#).

10. Do I qualify for the Payroll Protection Program? Is it worth applying?

The Payroll Protection Program, part of the CARES Act that congress passed in response to COVID-19, is a loan program primarily intended for small businesses, including farms, to be able to fund employee payroll if they have been impacted by the crisis. Check with the bank where you do business to see if you qualify and if funds are available. The loan will be converted to a grant if you use at least 75% of the funds to pay employees within 8 weeks of receiving the loan, and the other 25% are used for approved business expenses. If you typically do not hire much outside labor, it may not be worth applying for the PPP program.

Farm Commons recently released a webinar about the PPP program, which can be accessed [here](#).

11. What other assistance programs might be available to our farm?

The Families First Coronavirus Response Act passed by congress in March 2020 applies to all businesses with fewer than 500 employees, including farmers. It requires employers to provide their employees paid emergency family and medical leave as well as paid sick leave. Full-time employees automatically are eligible for 80 hours of paid sick leave, paid at $\frac{2}{3}$ of normal wages, while employees who have been employed for 30 days or more are eligible for up to 12 weeks of job-protected medical leave under certain conditions. Cost for providing the leave is offset by a refundable credit against the employer's share of payroll taxes (Social Security and Medicare) taxes, even if it exceeds the employer's tax liability.

The Pandemic Unemployment Assistance (PUA) program offers expanded unemployment benefits to farmers and farm workers who become sick during the COVID-19 crisis and may also provide unemployment compensation if a farm shuts down and employees are unable to report to work. Farmers or farm workers who must stay home to take care of sick family members may also qualify for benefits under PUA. Unemployment benefits vary by state, check with your state's unemployment office to learn how to apply.

For a comprehensive overview of COVID-19 assistance programs, [see the Farmers' Legal Action Group Farmers' Guide to COVID-19 Relief](#).

Do you have additional questions you'd like us to add to this document? Please reach out to Annalisa Hultberg (hultboo6@umn.edu) or Natalie Hoidal (hoidao16@umn.edu). This document will be updated as more information becomes available.