

# Make Food Safety a Priority for Your CSA



An increasing number of consumers around the country are including stops in their weekly summer routines to pick up a box of fresh, locally-grown produce from a local farmer. These consumers are shareholders or members of a Community Supported Agriculture (CSA) farm. They look forward to the flavor and freshness associated with locally grown produce and appreciate knowing where their food comes from and the farmer who grew it. Although Community Support Agriculture as we know it has its roots in other countries such as Germany, Switzerland, and Japan dating back in the 1960s, the direct-to-consumer CSA marketing model in the United States began on two East Coast farms in 1986. Since that time, the number of CSA farms in the United States has grown to over 12,500. The success, future, and growth of these businesses depend, in part, on loyal and satisfied customers who remain members year after year. As shareholders, these customers take on some of the production risks of the farm (which is helpful to the farmer); yet they still expect the produce to be fresh, safe, and of good quality. If their expectations are not met, they may not remain CSA members.

The way in which produce is grown and handled prior to members receiving the CSA delivery is a matter of trust because they do not see the pre- and post-harvest processes on the farm needed to get the produce ready. Good Agricultural Practice (GAP) guidelines help producers understand and follow good on-farm food safety standards, thereby ensuring the trust placed in them by consumers.

For more information on GAP, refer to Iowa State University Extension and Outreach publication PM 1974A, [On-farm Food Safety: Guide to Good Agricultural Practices \(GAPs\)](#).

CSA members can get a clear picture through non-verbal clues of whether food safety practices are followed when the produce is delivered to the CSA's designated drop site, whether it is their front porch, on the farm, or at a grocery store parking lot. Today's consumers are more aware of food safety risks associated with fresh produce than in years past, especially with national outbreaks making headlines. Therefore it makes sense for growers to use GAPs to mitigate risks. Ways in which CSA farmers can demonstrate food safety assurances to their customers are presented in this publication. Best practices are discussed for before and during delivery, as well as at the delivery site.

## Before Delivery

To assure delivery of a fresh, safe product, it is important to make sure everything that comes in contact with the produce item is cleaned prior to and after use. This includes harvest tubs, distribution crates, tables, and delivery



**C**hlorine bleach is a commonly used and readily available sanitizer. A common recipe for a chlorine-based sanitizing solution (using a 5-6 percent household chlorine bleach concentration) is one tablespoon bleach (non-scented) per one gallon of room temperature water and two teaspoons per gallon for concentrated (8 percent) bleach. Sanitizers exposed to air lose concentration over time so it is best not to mix large quantities of sanitizer and store for over a day. Remember to keep cleaning and sanitizing agents away from the food.

containers. There is a difference between clean and sanitized. Clean means free of any visible soil, whereas a sanitized surface will further reduce the presence of any harmful microorganisms.

### **Cleaning steps:**

1. Rinse or brush off soil or other residue.
2. Wash with soap and water (be sure water is from a clean source).
3. Rinse to remove any remaining residue and detergent.

### **Sanitizing procedure:**

1. Apply a fine spray of the sanitizer (at the appropriate concentration).
2. Allow to air dry, do not wipe or rinse off.

For more information on cleaning and sanitizing food contact surfaces and containers, refer to ISU Extension and Outreach publication PM 1974C, [On-farm Food Safety: Cleaning and Sanitizing Guide](#).

## **Delivery Containers**

CSA farms use a variety of containers to transport and deliver their products to members. Some common reusable containers include crates, boxes, bags, plastic tubs, or bushel baskets. Regardless of the type of container, it should be made from a cleanable material and effectively cleaned and sanitized before each delivery. Consumers perceive cleanliness through their eyes – appearances do matter – so always keep delivery containers clean. To avoid product contamination, hard to clean materials such as bushel baskets and wood boxes can be lined with disposable food-safe plastic liners. (Be sure the material is approved for food contact, do not use garbage bags.) Cardboard boxes should be treated as single-use containers for fresh produce unless disposable box liners are used.

Although most customers would prefer minimal packaging, it may be necessary to help retain freshness and keep the delivery container clean. Produce such as berries and small-fruited tomatoes can benefit from clamshells or boxes used to prevent crop damage due to crushing. Beans, snap peas, and other produce may benefit from being bagged to retain their quality.

## **Transportation Vehicle**

A lot of effort has gone into producing, cleaning, and packing fruits and vegetables for a CSA delivery box. All of this work can be undone during delivery and pick up if precautions during transportation are not taken. Temperature management during delivery is vital to retain produce quality and safety. Fruits and vegetables that require refrigerated storage should be cooled thoroughly and put in the distribution container just prior to delivery. Transportation to destinations should be in a clean, cooled, covered, and protected vehicle, such as a van. CSA farms that have drop sites for customer



**There are many types of containers used for CSA deliveries: reusable corrugated plastic boxes, stackable plastic crates, cardboard boxes, and reusable plastic-coated bags.**



**Although most customers would prefer minimal packaging, it may be useful to help retain freshness and keep the delivery container clean.**

pick-up should keep highly perishable produce, such as leafy greens, in coolers with the lid always closed and out of direct sunlight until the produce is picked up. For most produce items, the optimum environment for delivery is to keep the produce refrigerated, particularly if product travels a considerable distance or the CSA share distribution at the drop site will take more than a few hours. In the hot summer months, when fresh produce is most abundant, it doesn't take long to lose quality and increase safety risks when fruits and vegetables are exposed to high temperatures.

## Delivery/Distribution Site

There are several simple things that farmers can do at the location where product is distributed that demonstrate attention to food safety.

Some CSAs deliver directly to homes and businesses. If delivery is to a home, encourage members to have a cooler with a freezer pack inside placed outside of the house if they are not going to be home at delivery time. Be sure the designated drop-off point is in a shady, protected location. Air conditioned offices help retain quality for a short period of time and many businesses have refrigerators for employee use. Remind members not to leave their CSA delivery in a parked car. Even a few minutes in a hot car can damage the quality of the produce.

Many CSA farms have customers pick up their weekly shares between set hours at specific locations, such as parking lots or parks. Clean tables and containers for this type of market-style distribution shows attention to food safety. A clean washable or disposable table covering helps keep the food surface clean and looks professional.

While waiting for pick-up, delivery containers should be kept in protected locations such as indoors, in a cooled vehicle, or under a canopy or awning to prevent damage due to heat and rain. Fruits and vegetables held in containers heat up and lose quality rapidly if not stored appropriately, even if it is only for a couple of hours. The enclosed container or cover serves an additional purpose of protecting produce from dust, birds, and other contaminants. Delivery containers should be kept protected. It is best for the quality and safety of the product to keep highly perishable items, such as leafy greens and berries, in a cooler and transfer the products to CSA boxes when customers arrive for pick-up.

CSA farms that allow customers to select the allotted number of items from a bulk crate or box risk contamination and damage of their products through customer handling. This risk can be reduced by having a handwashing station available and thorough signage encouraging customers to wash their hands prior to selecting their products. Having a portable handwashing station at your CSA drop-off site sends a powerful message that food safety is a high priority. Hand sanitizers are not a substitute for hand washing (a 20 second process using soap and water) as they don't kill all harmful microorganisms, but they don't hurt and can help reduce contamination. Keep deli tissues or utensils such as tongs available to grab green beans, snap peas or leaf lettuce as a way to reduce potential contamination.



**If CSA delivery is to a home, encourage members to set out a cooler with a freezer pack placed inside if they are not going to be home at delivery time.**



**Many CSAs have customers select and bag their weekly items. A handwashing station or hand sanitizer available to customers will demonstrate commitment to food safety.**



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## CSA Employees

The success of a CSA depends on its people. First impressions of employees during delivery and distribution are important. Personal hygiene, appearance, and worker health demonstrates the CSA's attention to cleanliness and food safety. Clothes worn for farm work can be a source of contamination and do not portray a professional sales image when delivering or supervising CSA pick up sites. Clean aprons and a tidy appearance also send a positive message.

The health of workers packing and delivering the CSA boxes is also important as humans carry microbial pathogens on their skin, in their hair, on their hands, and in their digestive systems or respiratory tracts. If workers are sick with any of the symptoms described below, they should stay home and not work around food. A person working around food should be free of vomiting, upset stomach, and diarrhea for at least 24 hours before returning to work. If an employee has been diagnosed with a specified illness such as Hepatitis A, jaundice, or Norovirus, it is advisable to report this to the health department as these viruses are easily transmitted to others. Someone with a cold, sore throat or fever doesn't project a healthy image to customers so it is best to assign them alternate duties, that do not involve contact with food or food containers. Open cuts or sores on hands also pose a health threat and should be covered with a bandage and then a single-use glove.

## Summary

CSA delivery and distribution methods provide many non-verbal cues to customers about food safety priorities – the quality and cleanliness of the delivery container, packing of product in the container, delivery vehicles, display and handling practices at the distribution point, and workers health status and attire. Attention to these details not only assures a safe product but also strengthens customer confidence and improves their in the producer and their products, which ultimately increases long-term membership retention.

## Resources

Visit [iowafoodsafety.org](http://iowafoodsafety.org) for food safety topics from farm to fork and a complete list of resources. The website also includes several free, downloadable publications.

The North Central Regional (NCR) Center for FSMA Training, Extension, and Technical Assistance was selected by the USDA Food and Drug Administration (FDA) to represent the 12 states in the Midwest region of the United States (Iowa, Illinois, Indiana, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, Ohio, and Wisconsin). The Center's purpose is to establish a network of educators and produce growers and processors to assist with conducting a regional needs assessment and identifying gaps in knowledge related to the FSMA Produce Safety Rule and Preventive Control Rule. It will develop and implement a food safety program that addresses the needs of small-scale growers/processors and educators in the North Central Region. For more information and resources go to: [www.ncrfsma.org](http://www.ncrfsma.org).



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