

FARM FOOD SAFETY FACT SHEET

Reducing Food Safety Risks During Harvest

During harvest look for ways to reduce contaminating produce. Harvest tools, bins, harvesters, and the environment are all potential sources of contamination. This fact sheet will discuss methods to keep produce as clean as possible and prevent contamination during harvest.

Harvest

Just before and during harvest take time to look for conditions that might affect produce safety. Be aware that harvesting involves a lot of hand contact and take measures to prevent contamination of produce by workers.

- Make sure harvesters have washed their hands before starting to pick. This is especially important if they have just come out of the bathroom, smoked a cigarette, eaten lunch, or had contact with animals.
- Conduct a walk-through inspection of the field before harvest to determine if animals or animal droppings are present.
- Train growers to reject produce that shows decay, is damaged, or has visible signs of bird droppings.
- No part of the crop that comes in contact with animal or bird feces should be harvested. Workers should watch for signs of animal waste in nearby areas.
- Do not harvest produce that has fallen on the ground (unless it is a crop that normally contacts the ground such as onions, beets, and carrots).



Covered harvest wagons help keep birds from contaminating clean harvested produce.

- Remove as much soil as possible from harvested produce before it enters harvest bins.
- Don't let harvested produce sit in the field for any longer than necessary. Quickly cooling produce slows the growth of microorganisms and lessens spoilage, benefiting produce safety and quality.
- Protect harvested produce from contamination by birds or rodents.



Harvest stands like this one fit tomato boxes, keeping them up off the ground so that neither boxes nor produce contact the soil and potential contaminants.

Harvest Containers and Tools

Keep it clean. There is no good reason for putting clean produce in a dirty container that might introduce a pathogen.

- Choose containers that can be cleaned, such as plastic.
- Clean containers and tools between uses so they do not serve as a source of pathogens that can spread from crop to crop.
- Use your harvest containers and tools only for produce. **Never** use them for storing chemicals or as trash containers. Use separate containers for collecting culls during grading and packing.
- Inspect reusable containers before harvest to make sure they are in good repair and free of splinters, nails, or other embedded objects. Food-contact totes, bins, and other harvest containers that cannot be repaired or adequately cleaned should be thrown away.
- During the off-season, best practices are to store food-contact harvest containers indoors off the floor in a clean, dry place. If

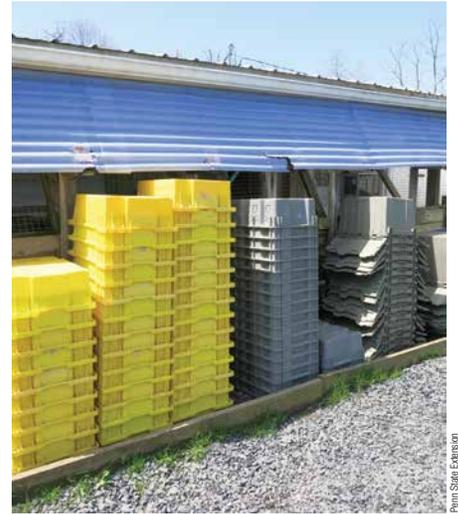
containers must be stored outside, clean and sanitize them before using them the next year.

- Keep pallets clean. Consider switching to plastic pallets, which are easier to clean.
- Develop standard operating procedures for sanitizing picking containers and harvest equipment.

Harvesting Equipment and Machinery

Tractors, trailers, and farm vehicles can be sources of physical and chemical hazards. They can also move pathogens from contaminated areas to growing and handling areas.

- Keep equipment and machinery in good repair. Before the season starts, check for leaking fluids or loose or damaged parts, and make repairs before the season begins.
- Protect headlight bulbs and glass windows on tractors by covering them with plastic or replacing them with shatterproof materials so there is limited chance of sharp fragments contaminating produce.
- Instruct your workers on how to isolate and dispose of any metal, glass, or sharp plastic fragments they find in the field or if breakage occurs.



Consider where you store your harvest bins. At this site, runoff from the roof, which could contain bird droppings, may be running right into clean bins.



Dr. Cogger, Washington State University, designed these lightweight harvest carts, which can be pushed down the row by workers and keep produce boxes off the ground.



"Buckhorn" crates at this farm are color coded for harvest and postharvest.



Well-organized, clean harvest tools are kept in the packing area, ready to go back out to the field.



Power washing removes any old crop material that might harbor pathogens and contaminate the next harvest.



The cart pictured here was designed by a veteran market grower in northern Wisconsin.



Plastic, cleanable containers with holes drilled for drainage are an inexpensive option for postharvest storage.



Have a policy in place to retire boxes and bins when they are no longer cleanable.



Collapsible bins fold down, making them easy to wash and sanitize.

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This publication was supported in part by funding from the Pennsylvania Department of Agriculture and the Reinvestment Fund.

Penn State College of Agricultural Sciences research and extension programs are funded in part by Pennsylvania counties, the Commonwealth of Pennsylvania, and the U.S. Department of Agriculture.

Where trade names appear, no discrimination is intended, and no endorsement by Penn State Extension is implied.

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Produced by Ag Communications and Marketing

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Code EE0141 2/15pod