

Oregon Department of Education

School Garden Food Safety Program

Staff Training Manual and Log



Tab 4

- Someone who is in charge of food from the garden that is going to be harvested, prepared and served to the public MUST have a current food handler's card. This person is usually the kitchen manager, but it's recommended that the garden coordinator get one so they know the proper food handling procedures. They are inexpensive and available at www.orfoodhandlers.com
- ODE recommends that (at least) the Garden Coordinator be certified through a school garden training certification course.
 - In Oregon, *Growing Gardens* in Portland hosts school Garden Coordinator Certificate Trainings. They are typically held in the summer, and are in multiple locations throughout the State. You can find out all information by going to www.growing-gardens.org, and then go to the "resources" tab, and scroll down to "school gardens."
 - Another option is the Oregon 4-H Gardens Teacher and Volunteer Winter Training by Oregon State University in Multnomah County. Contact Maureen Hosty at 503-916.6075. Website: Google "Oregon 4H school garden teacher and volunteer training"
 - Cornell online training / GHP GAP (good handling practices/good agricultural practices www.gaps.cornell.edu -\$190
- The Garden Coordinator, Kitchen Manager or Cook, Food Service Director, Principal, and any other key stakeholders (like Facilities folks / Integrated Pest Management (IPM) Coordinator) should meet at the beginning of the school year so they all have a common understanding and agree about all things relating to the garden. The items discussed should be things such as: who is responsible for cleaning harvest containers; compost station locations; delivery times of produce; etc.
- The following are general guidelines that should be followed to ensure food safety in your garden. Remember, children are in an age group that is highly susceptible to foodborne illness.

When a school serves food from a school garden to students or the public, there are the same concerns as a cafeteria purchasing from a distributor or farm. There is an opportunity to make people sick if simple procedures aren't followed.

Hygiene: All students/staff wash hands thoroughly with soap and water before harvesting food to be served to the public. When harvesting, rewash hands after breaks, visiting restrooms, sneezing, coughing, handling trash or money, or anytime hands become soiled or otherwise contaminated. After produce is washed and ready to be served in the cafeteria, barriers such as gloves, deli paper or appropriate utensil should be used to touch ready-to-eat produce.

SPECIFICALLY, here is the procedure for hand washing when serving food to the public:

- Wash hands with warm, soapy water for 20 seconds
- Before and after handling food
- After using the bathroom*
- After blowing your nose, coughing or sneezing*
- Dry hands with single-use, disposable towels

**Note: when handling ready to eat food, the Oregon food handling rules state that after the above actions occur (bathroom break/blowing nose) the food handler must double-wash their hands. This means washing their hands in the restroom, and again at the hand washing station when returning to the worksite, typically a cafeteria. However, the Oregon health codes also stipulate that some workplaces will probably NOT have a proper hand washing sink available – like in a garden. In this case, the second step is not required, however harvester must take special attention and make sure they do an adequate job after going to the restroom or blowing their nose.*

It's crucial that ANY student or staff be excluded from gardening activities if they are ill, exhibiting symptoms such as vomiting, diarrhea or fever, so they will not spread bacteria leading to foodborne illness. Typically, students who are ill should not be at school anyway, so this shouldn't be an issue.

Composting: Composting cafeteria scraps can bring serious problems to the school. Compost piles can attract pests and potentially introduce harmful bacteria if the system is not done properly and monitored very carefully. **ODE recommends that you do not use cafeteria scraps for composting, UNLESS** your school garden staff (and students involved) are properly trained and have a solid system in place to ensure that you are minimizing risks associated with composting.

- One effective form of a cafeteria compost station is a table with holes cut into them and 5-gallon buckets placed in the holes.

Have a poster with pictures available showing what to compost and NOT to compost. The provided examples are available on our website: <https://goo.gl/FG5Hmq>

- . Click on the “School Garden” box and scroll down to the “Garden Safety” section. School assemblies work very well to educate the students all at once, showing examples of what’s ok to compost. Composting can generate excitement about the garden, too.



- Have a trained adult or **responsible** student monitoring the composting station during meal service period. Responsible students should be trained on this composting system.
- After the material is delivered to the compost pile, the buckets need to be cleaned and sanitized.
- **Do not compost:** bread & rice (doesn’t break down in the same way as others, and introduces harmful molds); meat products; dairy products; heavily coated or printed paper; magazines; oil of any kind; animal feces; sawdust (unless you know if all of the wood was untreated); diseased plants; weeds that are spread by roots or gone to seed.
- **OK to compost:** fruit and vegetable food scraps that are free of dressing or oils; banana peels; orange peels; melon rinds; apple cores; napkins; grass clippings; leaves; straw; shredded cardboard; coffee grounds and coffee filters.
- Although most all materials will eventually decompose, an efficient compost pile should have a 2:1 ratio of “browns” (leaves, cardboard, etc.) to “greens”(grass clippings, veggies) (known as a “C:N” ratio – carbon/nitrogen).
- **Compost procedure:**
 - Complete the composting log (included in this guide), following these procedures:
 - For “hot composting,” internal temperature should read at least 131 degrees for three days, then turned two times and reach 131 degrees after each turn at least.
 - Do not let the pile get above 140 degrees
 - The pile should then be cured for 3 months.
 - Note: The pile needs to be three cubic feet in size for doing hot compost and you will need to adjust the C:N ratio to reach the required temperatures to kill pathogens. Consult your OSU extension office for more guidance.

- Composting thermometer used should be regularly calibrated. To calibrate a bi-metallic stem thermometer, fill a cup with crushed ice, and then top it off with water. Immerse the end of the thermometer in the cup and stir around. The needle should read at exactly 32 degrees. Adjust the nut on the underside of the dial until this number is reached. Document when you do this procedure on the composting log.
- For “cold” composting, pile should be protected from pests and cured for at least one year after the last time last is added to the pile.
- Cold composting can take up to two years to completely break down!

Harvesting: Containers must be easily cleanable, non-porous, and food-grade. All implements and containers that come in contact with produce must be washed/sanitized.

Preparing harvested fruits and veggies: Typically harvested food from the garden is delivered to the cafeteria via a prior arrangement. The produce should be free and clear of soil. Typically this is done by pre-washing the produce at a washing station near the garden BEFORE delivery to the cafeteria/kitchen. The cafeteria staff would then prepare the produce, but in many cases this might be done by the garden staff. One of the most common problems is that school garden produce typically has a lot more dirt and bugs associated with the produce than produce purchased from conventional sources. This is why it’s crucial to pay special care in cleaning and prepping. Produce must be washed THOROUGHLY! Cafeteria staff sometimes has to double/triple wash school garden produce.

Animal activity: Including rodents, cats, and deer. It’s important to remember that a typical garden is in the animal’s natural environment. It’s almost impossible to keep animals completely out of the garden; however fencing or cages should reduce animal activity. Animals can sometimes jump over the tallest fencing. Other considerations to keep in mind:

- You might want to make a small-gauge chicken wire or similar fencing to keep rodents from getting through easily.
- Also, burying the wire a few inches into the ground discourages animals to burrow under.
- Netting to discourage deer and birds
- Surveillance, signs and/or at least regular monitoring to discourage “two-legged” pests or vandalism.
- It is important to realize that you cannot totally keep out all pests from a garden no matter what steps you take! It may be possible to minimize the pest activity by following some of the steps listed above. Consider “flagging” areas where animal abuse occurs, remove plant and dirt that’s been contaminated.

Eating “right out of the garden:” Only produce that is not in direct ground contact and shows no obvious signs of soil or other contamination should be eaten directly (“grazing”). Only the Garden Coordinator or responsible adult in charge should tell kids exactly what is safe to eat. There could potentially be something that would be unsafe to eat in a garden, such as rhubarb leaves.

Tools: Any use of tools (shovels, rakes, clippers, etc.) should be closely and directly supervised by adult(s) in charge. Power equipment such as tillers or trimmers are not allowed to be used by students under the age of 18 by Oregon law.

TRAINING DATE:	Person who conducted training:	
The following people attended a training session on School Garden Food Safety:		

Attach as many sheets as necessary if more are needed. Retain for current plus three following years.