

Developing Your Food Safety Program Jennifer Sowerwine

Asst. Cooperative Extension Specialist, UC Berkeley

UC ANR Workshop: Food Safety Basics for Urban Farmers June 8, 2017

Materials developed by UC Berkeley, UC Cooperative Extension Fresno/ Sacramento & Small Farm Program. Funding from USDA, NRI & BFRDP & ANR.

United States Department of Agriculture National Institute of Food and Agriculture

Where do I start?





Attend a Training! ☑ Learn about GAPS/GHPS

Good Agricultural Practices Good Handling Practices Methods farmers follow to prevent or minimize the risk of on-farm contamination of fruits and vegetables.

Take it one step at a time

- 1. Talk to your buyer: what do they require?
- 2. Assess food safety risks on your farm:
- 3. Develop your Food Safety Plan/Program
 - 1. Food safety policies
 - 2. SOPs
 - 3. GAPs
 - 4. Worker Training
- 4. Follow your plan, implement corrective actions
- 5. Keep Records

Step 1: Talk to your Buyer(s)

- What kind of food safety program/certificate do they require if any?
 - Self-certification?
 - Third party certification?
 - Any particular 3rd party certifier? (Primus, CDFA)
 - Organic certification sufficient?
 - CDFA Small Farm Food Safety guidelines?

Step 2: Assess risks on your farm What are potential sources of contamination?





WASSH!

Water

Runoff



Clean water for handwashing

Contaminated irrigation and produce wash water



Animal contamination

Domestic











Animal Feces

Bird Droppings

Deer Droppings





Rodents and Pests









Soil contamination



Soil contamination





Surfaces

Dirty Harvest buckets

Dirty packing tables



Cross-contamination in transportation











Dirty Boxes

Clean boxes?



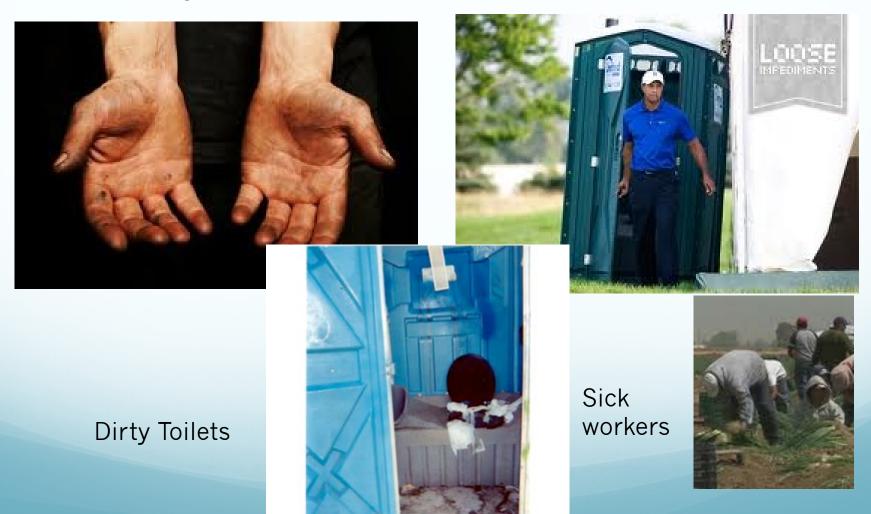
Dirty Hose



Health & Hygiene

Handling product with dirty hands

Not washing hands after using toilet



Summary of Risks

- Water
- Animals
- Soils
- Surfaces
 Hygiene
 (WASSH!)



How do I assess risks on *my* farm? Conduct a Farm Assessment/Self-Audit

USDA Good Agricultural Practices Good Handling Practices



Departure Date:

Name	Points	Yes	NO	N/A	Doc
	Points	Yes	NO	N/A	Doc
	4-				

en established.	15

	Points	Yes	NO	N/A	Doc
G-3	10				R
G-6					

(1-1)

(1-2)

Points Yes NO N/A Doc

Points Yes NO N/A Doc

Points Yes NO N/A Doc

Manure lagoons located near or adjacent to crop production areas are maintained to prevent leaking/overflowing, or measures have been taken to stop runoff from contaminating the crop production areas.

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GAP & GHP

AUDIT PROGRAM

FRUIT & VEGETABLE PROGRAMS

If risks are identified, then what?

Implement Corrective Actions

Risks

- Water
- Land & Soils
- Animals (intrusion)
- Surfaces & Equipment
- Worker Health & Hygiene
- Chemicals
- Transportation

Corrective Actions

- Water test & treatment
- Soil test, manure records, land use history
- Fencing, avoid harvest, traps
- Clean & sanitize
- Worker Training, Toilets & handwashing facilities
- Proper use & storage
- Covered, Traceback

Step 3: Develop your Food Safety Plan



"Say what you do, do what you say"

- Steps you take to address risks.
- Food safety policies for your farm
- GAPs/GHPs.
- SOPs for your farm
 - WASSH
- Worker training guidelines
- Record keeping sheets

Step 4: Follow your plan!









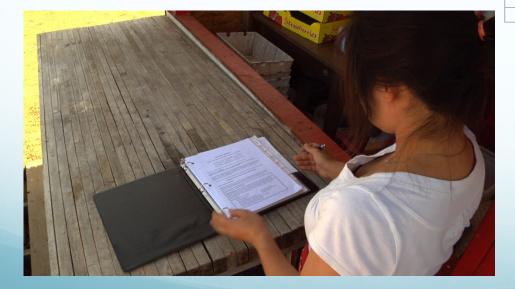
Step 5: Documentation/Record Keeping

— UC Berkeley/UCCE Food Safety For Small Farms Program

3. Toilet & Handwashing Maintenance Record

Date	Cleaned by	Hand Wash Water	Soap	Paper towels	Toilet paper	Toilet cleaned Mark with x
		checked/refilled	checked/refilled	checked/refilled	checked/refilled	
		checked/refilled	checked/refilled	checked/refilled	checked/refilled	
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		checked/refilled	checked/refilled	checked/refilled	checked/refilled	
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Record your actions.



Remember: 5 Steps

- 1. Talk to your buyer(s)
- 2. Assess your food safety risks
- 3. Develop food safety manual
- 4. Implement your program
- 5. Documentation

What a food safety plan looks like



Basic components of a food safety plan

- F.S. Contact Person
- Farm Description & Map
- Traceability
- Worker Health & Hygiene
- Worker Training
- Signage
- Toilets & handwashing stations
- Visitor sign in sheet

- Water test results
- Land and soil assessment
- Animal/wildlife monitoring & pest control program.
- SOP for Cleaning/sanitizing all surfaces, packing area, equipment, etc.
- SOP for Storage and Transportation
- Documentation

Resources

- Food Safety Plan Guide
- Food Safety Plan Template
- Food Safety Record Keeping Sheets
- Basic GAPs checklist what you should have
- How to develop an SOP
- Daily checklist for on-farm food assessment
- Visitor/Volunteer Food Safety Policy for your farm
- Food Safety Tips for School Gardens

Food Safety Plan Guide

California Small Farm Food Safety Plan Guide:

Standard Operating Procedures for Good Agricultural Practices*

> Jennifer Sowerwine Mary Vincent Richard Molinar Chuck Ingels Christy Getz Erica Chernoh Jenny Broome Debbie Thompson

University of California Division of Agriculture and Natural Resources

> Jan 2010 Updated Jan 2013

*This Food Safety Plan Guide provides a comprehensive yet concise description of Standard Operating Procedures for Good Agricultural Practices on Small Farms and associated worker training and documentation. The content aligns with requirements outlined in the USDA Good Agricultural Practices (GAPs) and Good Handling Practices (GHPs) Audit Verification Program yet is tailored to the small farm. Please contact Jennifer Sowerwine <u>isowerwi@berkelev.edu</u> or Christy Getz <u>cgetz@berkelev.edu</u> for more information.

Note: Standard Operating Procedures (SOP)

D. GENERAL SANITATION

Hand Washing Facilities: Good sanitation and proper use of hand washing facilities includes the following:

SOP: Hand Washing Facilities

- Handwashing facility is located in close proximity of toilet.
- All handwashing facilities are clean and water source is covered. They are supplied with single use towels, hand soap and potable water for hand washing. Trash can with lid is located in vicinity and emptied regularly.
- Disposal of waste water from hand washing does not cause unsanitary conditions, nuisance or contamination.
- Hand washing container is thoroughly cleaned and sanitized on a weekly basis by scrubbing with a clearly labeled brush that is stored separately.
- Cleaning and resupply records are maintained.
- Documentation: No. 3 Toilet & Handwashing Maintenance Record

Restroom Facilities: Good sanitation and proper use of toilet facilities includes the following:

SOP Restrooms Facilities

- Toilet facilities are located within ¼ mile or 5 min walk of workers.
 Field toilets are properly screened to keep animals and insects out. They are ventilated
- and provided with self-closing doors, lockable from the inside. Daily spot checks for cleanliness & spot cleaning/trash pick up.
- Weekly thorough cleaning (toilet, walls, floors) with Green Power (20 parts water to 1
 part Green Power) or equivalent & rinse with hose.
- Sanitize toilets and urinals with a separate, labeled brush
- · Sanitize doorknobs, and any other surface inside unit with separate brush.
- Fill paper products and soap dispensers.
- Provide covered trash receptacle & remove trash to dumpster as needed.
- Record initials and date of cleaning on record sheet # 2 when unit is serviced. Keep records for 2 years.
- Materials required & labeled "Restroom Use Only": broom & dustpan, brush for wall & floor, brush fooliet & urinal, single use wipe for door knob, labeled bucket, trigger sprayer (for spot cleaning), hose (for rinsing).
- Cleaning and resupply records are maintained

Documentation: No. 3 Toilet and Handwashing Maintenance Record

E. CHEMICALS AND PESTICIDES

Safe Pesticide Use

Before applying any pesticide, a grower must first obtain an "Operator Identification Number". To use a restricted pesticide, a grower must obtain a "Restricted Material Permit" and become a Private Certified Applicator" by passing a test. (If a grower is hiring a licensed pest control

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• SOP: BOXES

 Standard Operating Procedures—A set of procedures or steps farmers follow the same way every time to ensure food is clean and safe.

 All SOPs have record keeping sheets.

Note: Worker Training Guidelines

Worker Training 3: Pesticide Handler Training

The training shall cover, for each pesticide or chemically similar group of pesticides to be used: • How to read and understand the content of pesticide product labeling, Pesticide Safety Information Series

- leaflets, Material Safety Data Sheets, etc. The meaning of information contained in product label (such as precautionary statements about human health hazards, signal word, proper chemical handling including mixing and applying, application rate and
- how it can be achieved, PHI, REL, PPE) and other precautions of the chemical.

 Routes by which pesticides can enter the body; signs and symptoms of overexposure, emergency first aid
- for pesticide overexposure and how to obtain emergency medical care

 Routine and emergency decontamination procedures including spill clean up and the need to thoroughly shower with soap and warm water after exposure.
- Appropriate use and sanitation of required personal protective equipment.
 Safety requirements and procedures for handling, transporting, storing and disposing of pesticides (stored
- in locked area, transported separate from produce,)

 Environmental concerns such as drift, runoff, wildlife hazards.
- Environmental concerns such as drift, runoff, wildlife hazards.
 Warnings about taking pesticides or pesticide containers home.
- Proper disposal of left-over chemicals and chemical containers. Spray out remaining mixture and rinse sprayer with water, never store left-over mixture for later use. Never re-use containers. Triple rinse, empty, remove lid and puncture container—dispose of containers at approved hazardous material disposal site.

Documentation: No. 5 Worker Training Record

Worker Training 4: Pesticide Worker Safety

All employees who work in a field treated with pesticides has been trained within the last 5 years, in a manner the employee understands, before beginning work in the treated field. The training will include:

- The importance of routine decontamination and washing thoroughly after the exposure period.
- Restricted entry intervals and what posting means (both California and federal posting sign formats)
 Where pesticides are encountered, including treated surfaces in the field, residue on clothing, chemigation and drift.
- Routes of exposure
- Hazards of pesticides including acute effects, chronic and delayed effects, and sensitization effects.
- Common signs and symptoms of overexposure
- First aid including decontamination, eye flushing, and obtaining emergency medical care
- Warnings about taking pesticides or pesticide containers home
- The hazard communication program requirements of section 6761
 Employee rights as outlined in section 6764 of the California code of regulations
- employee rights as outlined in section of or o

Documentation: No. 5 Worker Training Record

• WORKER TRAINING BOXES

- ALL helpers and workers are trained, understand, and implement GAPs.
- Worker trainings are recorded.

Note: Record Keeping Sheets

3. Toilet & Handwashing Maintenance Record

Date	Cleaned by	Hand Wash Water	Soap	Paper towels	Toilet paper	Toilet cleaned Mark with x
		checked/refilled	checked/refilled	checked/refilled	checked/refilled	
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		checked/refilled	checked/refilled	checked/refilled	checked/refilled	

Food Safety Plan Template

(Change, delete, or fil-in parts in yellow, remove highlights. This template will help for either self certifying or 3rd party GAPs audit. It is usable for a "Farm Review audit" and/or Field Harvesting/Packing audit". You may have add/revice for a Harmonized or Global GAPs audit.]



Good Agricultural Practices (GAPs)

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Checked boxes indicate I have read documentation to support this 🔲

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Basic Gaps Checklist

WASSH!

<u>General</u>

- **Map of farm** (fields, structures (toilets, buildings, storage sheds), water source, chemical storage site, adjacent land & use).
- **Documentation**: See checklists.

<u>Water</u>

- Drinking water: Clean, potable drinking water available at all times.
- **Irrigation water:** Water test results available (total coliform for well water, E. coli for surface) to measure presence of fecal coliform. Treatment as needed.
- Hand washing water, and produce wash water: Must be potable.

<u>Animals</u>

- Wildlife: Monitor and record presence.
- **Rodents**: Develop pest control program as needed.
- **Domestic animals**: Exclude domestic animals during growing and harvest season.

<u>Surfaces</u>

• **Clean and Sanitize**: Develop SOPs for cleaning and sanitizing all surfaces (buckets, harvest equipment, wash tubs, packing area, transportation vehicles). Packing containers are protected from contamination.

<u>Soils</u>

- Land Use History: no known risk of prior contamination.
- Manure: Analysis reports available

Health & Hygiene

- **Signage**: (handwashing, designated lunch/smoking area, non-potable water on handwashing station).
- **Field Sanitation units** (toilet & handwashing facilities available for every 20 workers; 1 male & 1 female or if <5 workers, only 1 lockable unit required).
- Worker Hygiene Training: Train all workers in (handwashing, hygiene, illness & accident response procedures).
- **Chemical Storage**: in locked, separate shed.

How to develop Standard Operating Procedures (SOP)

- Standard Operating Procedures—A set of procedures or steps farmers follow the same way every time to ensure food is clean and safe.
- All SOPs have record keeping sheets.

On-Farm Food Safety Assessment

Daily Check List

Pre-Harvest:

- 1. Are toilet and wash facilities properly located, clean and stocked with toilet paper, wash water, soap, and paper towels?
- 2 Is drinking water and shade available to all workers?
- 3. Are harvest containers available, clean, well located and protected?
- 4. Is harvest, washing and packing equipment and area clean, sanitized and in good condition?
- 5. Are shade or other pre-cool measures in place?
- 6. Is there evidence of animal feces, dead animals, animal crop damage or other physical contamination in the crop area that needs to be isolated for "noharvest"?
- Are there other notable sources of contamination such as dump sites, fuels or chemicals, manure, burning debris, or water runoff that may affect food safety?
- 8. Is transportation equipment clean and available with protective covering?
- 9. Are all signs posted to a) instruct workers and visitors to wash hands before and after handling food, harvesting, eating and smoking, and b) indicating that wash water is not potable?
- 10. Have all new workers and visitors been trained in proper hygiene practices and their training been recorded?
- 11. Have all traps or pest control measures been checked and any animals disposed?

End of Day:

- 1. Are harvest buckets and washing bins cleaned and sanitized?
- 2. Has the drinking water container been cleaned and sanitized?
- 3. Is the packing area cleaned, sanitized and free of debris?
- 4. Is all packaging stored in a safe, secure location.
- 5. Are all chemicals stored in a safe, locked storage cabinet away from the packing area?
- 6. Have all Personal Protective Equipment been cleaned?
- 7. Have all garbage cans been emptied?
- 8. Do any supplies need to be updated (hand gloves, cleansers, sanitizers, toilet or hand-washing supplies, first aid kit, record keeping sheets, signage)
- 9. Have all activities been recorded in the food safety record keeping sheets?

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ge or suspicious activity and/or chemicals in or

around the facility

Questions?



