

# Training Guide for Workers: Pre-Harvest On-Farm Food Safety

This material was developed by the North Central Region Center under a grant from the Food and Drug Administration.

FDA has provided technical assistance in developing this material; however, this information has not been formally approved by FDA.

It does not represent any agency determination or policy.

Funding provided through the Department of Health and Human Services Food and Drug Administration (Grant Number 1R01FD005685-01) titled "Strategies for Successful Implementation of FSMA (Food Safety Modernization Act) in the North Central Region through Adoption of a Systems Approach and Stakeholder Engagement Framework."

In accordance with Federal law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, this institution is prohibited from discriminating on the basis of race, color, national origin, sex, age, disability, and reprisal or retaliation for prior civil rights activity. (Not all prohibited bases apply to all programs.) Program information may be made available in languages other than English. Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, and American Sign Language) should contact the responsible State or local Agency that administers the program or USDA's TARGET Center at 202-720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at 800-877-8339. To file a program discrimination complaint, a complainant should complete a Form AD-3027, USDA Program Discrimination Complaint Form, which can be obtained online at <a href="https://www.ocio.usda.gov/document/ad-3027">https://www.ocio.usda.gov/document/ad-3027</a>, from any USDA office, by calling 866-632-9992, or by writing a letter addressed to USDA. The letter must contain the complainant's name, address, telephone number, and a written description of the alleged discriminatory action in sufficient detail to inform the Assistant Secretary for Civil Rights (ASCR) about the nature and date of an alleged civil rights violation. The completed AD -3027 form or letter must be submitted to USDA by: (1) Mail: U.S. Department of Agriculture Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW Washington, D.C. 20250-9410; or (2) Fax: 833-256-1665 or 202-690-7442; or (3) Email: <a href="mailto:program.intake@usda.gov">program.intake@usda.gov</a>. This institution is an equal opportunity provider.

For the full non-discrimination statement or accommodation inquiries, go to <a href="www.extension.iastate.edu/diversity/ext">www.extension.iastate.edu/diversity/ext</a>.

(This page is included to make sure the document will print correctly as a flipchart.)



### Wildlife and Domesticated Animals in the Field

- Our farm's policies are: (INSERT POLICIES)
- You must wash your hands after touching animals [Section 112.32(b)(3)(v)]

### **Suggestions:**

- While you are working, if you see evidence of animal intrusion, then (INSERT INSTRUCTIONS)
- While you are working, if you see animal fecal matter, then (INSERT INSTRUCTIONS)
- While you are working, if you see domesticated animals in the covered produce fields, then (INSERT INSTRUCTIONS)
- Domesticated animals are not allowed to be (INSERT OFF-LIMIT AREAS)
- Working animals are not allowed to be (INSERT OFF-LIMIT AREAS)

### **Notes:**

- Must control for fecal content and litter from domesticated animals in the field [Section 112.134(a)]
- Must take steps to minimize contamination from working animal fecal matter [Section 112.32(b)(2)]
- If there is significant evidence of animal contamination, then you must evaluate whether the
  covered produce can be harvested and take measures during the growing activities to determine if
  workers should harvest the covered produce [Section 112.112 and 112.83 (b)(2)]
- If there is a reasonable possibility of animal intrusion, then you must determine whether there is reasonable probability for animals to contaminate covered produce [Section 112.83(b)]
- Must adequately control the excreta and litter from domesticated animals and working animals [Section 112.134(a)]
- You are NOT required to take measures to exclude wild animals from the growing area or destroy animal habitat [Section 112.84]



### **Tools and Containers**

It is also important to think about the cleanliness of the tools and containers we use. Our farm policy is to clean: (INSERT HOW FREQUENTLY TO CLEAN/SANITIZE AND OTHER POLICIES)

### **Suggestions:**

- Use the containers provided for you.
- They should only be used to hold produce—never to carry chemicals, tools, other food/ crops, or personal items – as this will reduce the risk of cross-contamination.
- Before using for harvested food, make sure the container is clean and in good condition. If
  you see cracks, or something else that could hurt you, or damage the product, get a new
  container and let your supervisor know.
- Elevate containers off the ground to avoid contact with soil. This may mean putting a flipped over container below the harvest tote. This helps keep the soil in the field and not carried into the packing shed.
- Remember we will need to clean that container before it comes in contact with food.

### **Notes:**

- All tools, such as spades, hoes, and harvest totes or containers, **must** be inspected, maintained, and cleaned regularly [Section 112.123(d)(1)].
- Records must be kept for all cleaning and sanitizing activities. Date and method must be on record [Section 112.140(b)







# Tools and Equipment Questions





# **Tools and Equipment**

It is also important to think about the cleanliness of the tools and containers we use. Think about tools, tractors, wagons, hoes, containers/bins, tables, etc.

# Questions you as a worker can ask yourself:

- Is this tool or equipment clean?
- Is this tool or equipment in good repair (is it broken, cracked, or not cleanable)?
   If dirty, then (INSERT INSTRUCTIONS)

# **Suggestion:**

Clean and sanitize it or put in a dirty tool/equipment area for cleaning later and get a different tool/equipment

If not in good repair, then (INSERT INSTRUCTIONS)

- Contact a supervisor and gain advice on:
  - -what to do with tool/equipment AND
  - -what to use instead of that tool/equipment
- Get another tool/equipment







# **Cleaning and Sanitizing**

# What are the steps to follow when cleaning and sanitizing surfaces and equipment?

- 1. First, rinse or spray down or remove dirt from equipment, table, tools, etc.
- 2. Secondly, clean by using the right detergent and cleaning tools.
- 3. Then rinse with clean water. Water **must** be from a source that meets microbial standards [Section 112.44(a)(3)].
- 4. Then use an approved sanitizer for food contact areas (sometimes rinsing again may be required, depending on the label of the sanitizer).
- 5. Finally, allow surfaces and equipment to air dry.

Records **must** be kept for all cleaning and sanitizing activities.

Date and method **must** be on record [Section 112.140(b)(2)]





### Water Use on the Farm

You may be asked to do irrigation, pesticide application, crop sprays, frost protection, dust abatement, etc. all that use water.

Here are some questions to ask before you start these tasks with regard to water:

- 1. Does this source meet microbial standards?
- 2. How should I apply this water source (i.e. overhead, drip, flood, etc.)?
- 3. Is this the appropriate time to apply the water onto the produce?

**Notes:** The <u>water guidelines are under review by FDA</u> and may change. (https://www.fda.gov/food/food-safety-modernization-act-fsma/fsma-proposed-rule-agricultural

-water)

- Untreated water sources that are used as agricultural water during pre-harvest must be monitored for the presence of generic *E.coli* and must have a microbial water quality profile [Section 112.46(b)]
- **Must** inspect all agricultural water sources and water distribution systems prior to use (at beginning of growing season, at least once a year) [Section 112.42]
- This water **must** be below 126 CFU generic *E.coli*/100ml geometric mean and 410 CFU generic *E.coli* /100 ml statistical threshold value [Section 112.44(b)]
- There are different risk levels depending on if it is a public water supply, ground water, or surface water
- Must control for hazards by maintaining agricultural water sources and applying corrective actions when needed [Section 112.42 (c)]
- Multiple corrective measures could be used if microbial criteria are exceeded [Section 112.45(b)]





# **Biological Soil Amendments of Animal Origin Use on Farm**

You may be asked to handle biological soil amendments of animal origin

# Here are some questions to ask before you start this task:

- If you are asked to apply compost or fertilizer:
  - 1. Did your supervisor approve the source?
  - 2. Have you been trained on how to apply (i.e. injection, on the ground, on produce, etc.)?
  - 3. Is this the appropriate time to apply onto the produce or field (i.e. the time between application and the harvesting of the produce) according to your supervisor?
- If you make agricultural tea or compost:
  - 1. Ask for training from a supervisor
  - 2. Records are required for making compost. Ask where the records are stored and how to use them [Sections 112.3(c) and 112.60]

### Note:

Human waste is not permitted except for Class A biosolids [Section 112.53]

Photo credit on previous page: Shutterstock