

NDSU

EXTENSION

2023



# Upcoming Webinars

- **March 8 - What Gardeners Should Know About Pesticides**  
- Andrew Thostenson, Extension pesticide safety specialist, NDSU
- **March 15 - Safely Using a Steam Canner to Preserve the Bounty of the Harvest**  
- Barbara Ingham, professor and Extension food safety specialist, University of Wisconsin-Madison







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Presenter

Audio Settings



Chat



Raise Hand



Q&A

Leave

- **Please complete the short online survey** that will be emailed to you after today's webinar. It will take just a couple minutes!
- Be sure to sign up for an opportunity to win a prize in the drawing. After submitting the survey, a form to fill out with your name/address will appear.

***Acknowledgement: This project was supported by the U.S. Department of Agriculture's (USDA) Agricultural Marketing Service through 21SCBPND1069. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the USDA.***





March 1

# Keep Your Produce Safe: From Home to Market

Shannon Coleman, associate professor and Extension food safety specialist, Iowa State University





# Learning Objectives

- Identify food safety risk that can lead to cross contamination in the garden
- Illustrate when you should wash your hands
- Demonstrate food safety risk and corrective actions through scenario activity



# Produce Outbreaks Increased

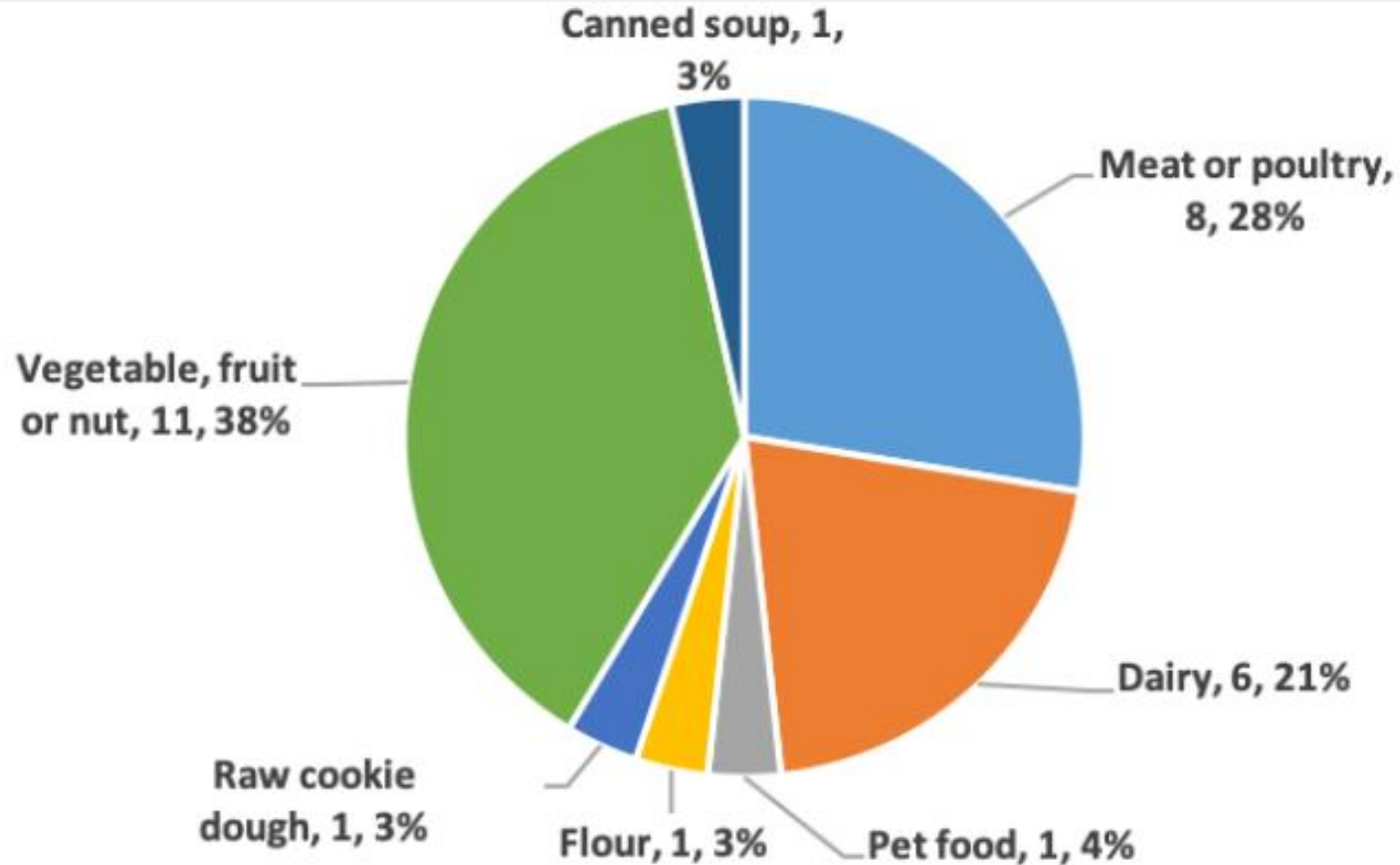
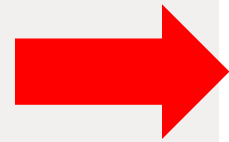


Figure 1. Demonstrates that of the 29 food recalls that “poisoned” the most people in the U.S. between 1985 and 2017, the highest number of recalls, 11, was of vegetable, fruit, or nut products (Water Quality and Health Council 2020)

## GROWING TOGETHER: FOOD SAFETY IN DONATION GARDENS



Developed by Shannon Coleman, assistant professor and state human sciences specialist in food safety with Iowa State University Extension and Outreach and Heather J. Pamperin, 2017 Department of Food Science and Human Nutrition Cyclone Scholar Summer Research Experience Intern and student at University of Wisconsin-Madison.

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Available at: <https://store.extension.iastate.edu/product/15257>



# Produce Safety Concerns with Animals

- More likely to harbor human pathogens
- Spread contamination around fields as they move
- Limit their access to fields and work to ensure contaminated produce is not harvested



# Use appropriate water source



- Pathogens can be introduced to fresh produce through water sources
- Water quality is important to manage the critical risk during production
- Water sources
  - *Surface*
  - *Ground (well)*
  - *Municipal (**recommended**)*





# Containers & Equipment Safety

- Workers, water, soil, animals, adjacent equipment surfaces
- Food contact surfaces should be:
  - Non-toxic, non-absorbent
  - Durable, able to withstand corrosion
  - Able to be easily cleaned and sanitized



# Handwashing

**1. Wet hands with water**

**2. Apply soap and lather**

- Be sure to wash the front and backs of hands as well as in between the fingers
- Rub hands together for AT LEAST 20 seconds

**3. Rinse** hands thoroughly with clean water

**4. Dry** with a paper towel

- Turn off faucet with used towel

**5. Throw** the paper towel in a trash can





# When Must Hands Be Washed?



After using the toilet

Before starting or returning to work

Before and after eating and smoking

Before putting on gloves

After other time hands may become contaminated

Available at: <https://store.extension.iastate.edu/product/12559>

# Entry for Contamination

Bruised, punctured, or damaged produce provide – entry for contamination for foodborne pathogens





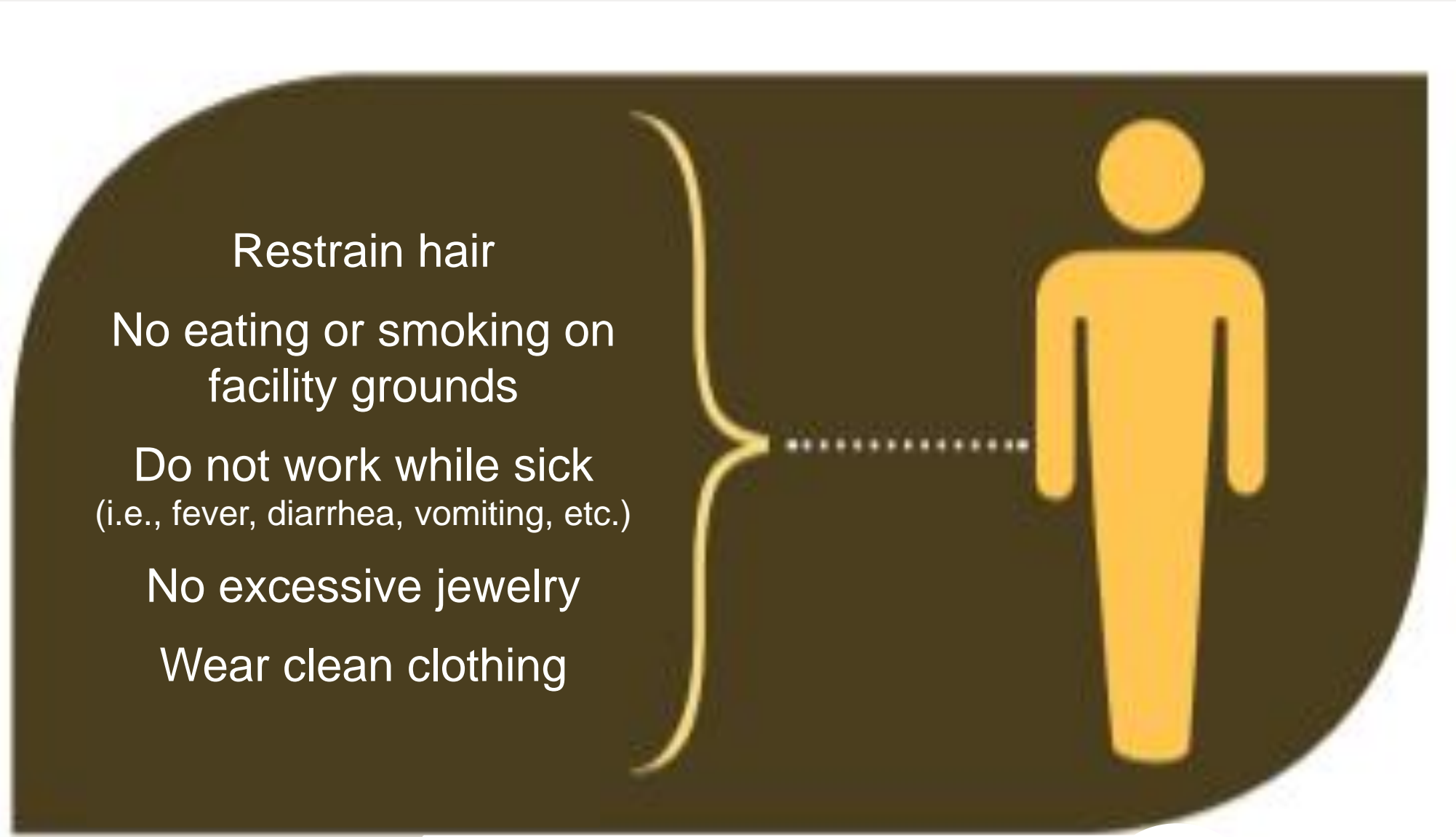
# Transportation Considerations



- Variety of transportations sources
- Best practice is to:
  - Use **CLEANED & COVERED** transportation (i.e., large SUV; tarp, bed cover, etc.)
  - If vehicle is used for other activities such as carrying live animals or compost, please **clean and sanitize** before use.



# Personal Protection



# Garden Safety Program in Iowa

The screenshot shows the Iowa State University Extension and Outreach website. The top navigation bar includes links for ISU, News, Store, Contact Us, and Offices. The main header is red with the university's name and a search bar. Below the header, a red banner displays 'Human Sciences' and a 'Donate' button. A horizontal menu lists various topics: Home, Family, Food, Finance, Focus, Courses and Training, and Events. The main content area features the 'Produce Basics' event, including a description, intended audience, and format. A sidebar on the right lists upcoming events.

ISU News Store Contact Us Offices

IOWA STATE UNIVERSITY  
Extension and Outreach

Search

Human Sciences

Donate

Home Family Food Finance Focus Courses and Training Events

## Produce Basics

**Description:** Preparing fresh produce is easy if you have the information you need and a few skills. Learn how to store, clean, prepare, and preserve various fresh fruits and vegetables.

**Intended audience:** Adults

**Format:** 2 hours

### Upcoming Events

06 JUL 9:00 AM	<b>Produce Basics</b> Atlantic, IA
03 AUG 5:30 PM	<b>Produce Basics</b> Corning, IA



# PRODUCE SAFETY in Gardens

## IN-FIELD ACTIVITIES

Cross Contamination  
Food Safety Scenario  
Food Safety Tool Kit



IOWA STATE UNIVERSITY  
Extension and Outreach

# Produce Safety Interactive Activities

Permanent link for the activities:

<https://store.extension.iastate.edu/product/16131>



# FOOD SAFETY SCENARIO ACTIVITY

*Start on page 8*



## Instructions

For each scene, in the chat list any potential food safety risks and corrective action within each scene in the contamination site.





**Scene 1: 8:30 a.m.—**  
Jim, the garden manager, usually works alone and comes to work with visible dirt stains on his clothing.

Food safety risk:?  
Corrective action:?





## Food safety risk(s):

- *Dirty clothing*
- *Open toe shoes*
- *Dirty shovel*

## Corrective action:

- *Clean clothing*
- *Closed toes shoes*
- *Clean shovel*





### SCENE 3

## Scene 3: 9:15 a.m.—

While harvesting produce, Jim notices numerous animal droppings on or around produce in the garden.

Food safety risk:?  
Corrective action:?





### SCENE 3

## Food safety risk(s):

- *Animal droppings*

## Corrective action:

- *Segregate area for no harvest*







**Scene 5: 9:45 a.m.—**  
Jim could not locate harvesting containers right away, so he placed the harvested produce directly on the ground.

Food safety risk:?  
Corrective action:?







**SCENE 5**

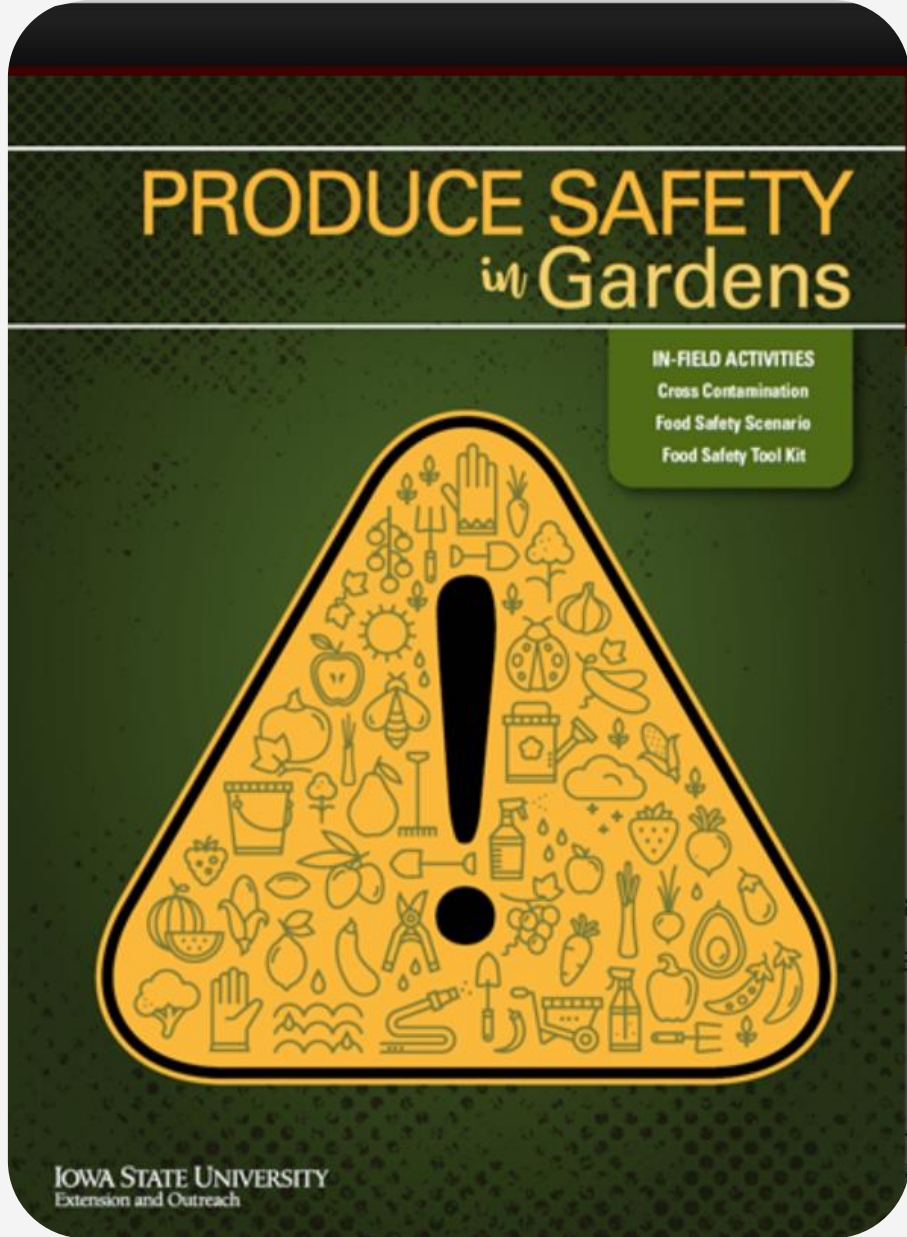
## Food safety risk(s):

- *Container on ground*
- *Wooden container*

## Corrective action:

- *Stack container on other containers*
- *Add plastic liners or use plastic containers*





# Produce Safety Interactive Activities

Three activities

- Food Safety Scenario
- Cross Contamination
- Food Safety Toolkit



# Learning Objectives

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# CONTACT INFORMATION

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