While We Wait – Workshop Zoom Settings

- Set your view settings to “Speaker View” to better see who is talking
- Keep your microphone muted (camera optional) outside of breakout rooms.
- Feel free to use the chat to let us know:
  - where you’re joining from
  - the organization or educational institution
  - Have you ever had food poisoning?

The Meeting will begin at 10:02 AM PST
Zoom Community Agreements

We recognize that the virtual world presents new challenges. In order to do our best to maintain a space of inclusivity, productivity, and respect, we ask that we all agree to the following:

- Chat is open for questions, comments, and concerns, but all communication must be respectful.
- Keep your microphone muted outside of breakout rooms.
- Be patient and understanding with others regarding technology. We all have varying levels of access to and familiarity with technological resources.
- We acknowledge you likely are working from home.

Anyone who violates the agreements or otherwise disrupts our Zoom community will be removed by our moderator.
Zoom Community Agreements: Breakouts

- Join your breakout room when prompted.
- Remain in your breakout room during end countdown. You will be automatically brought back to the main session.
- Share without expectations. What works for one organization may not necessarily work for others.
- Stories stay, lessons leave. Don’t distribute what you heard from someone unless you have permission to do so.
Food Illness: Outbreak Prevention and Detection
NGSS Connection

- Science and Engineering Practices
  - Obtaining, evaluating, and communicating information

- Disciplinary core ideas
  - MS-LS1-5 Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.

- Cross Cutting Concepts
  - Cause and Effect; Patterns

- Oregon distance learning for all guidelines
  - 6-12 supplemental activity is cooking
Why teach agriculture and food system concepts?

- Everyone eats, so everyone is involved in agriculture
- Today’s students are far-removed from production agriculture (1% of Oregonians are farmers)
- Agriculture provides an arena for real-world discovery and problem-solving
Foodborne Illness

- 1 in 6 people affected each year
- 128,000 hospitalized, 3,000 people die
- Costs more than $15.6 billion each year
- 31 Pathogens that are tracked for foodborne illness

Regulatory Agencies Collaborating on Foodborne Illness Outbreaks
Center for Disease Control (CDC)
U.S. Food and Drug Administration (FDA)
United States Department of Agriculture (USDA)
Food Safety and Inspection Service
Questions:

1. Now that you heard some foodborne Illness statistics how would you connect food safety in your classroom?

2. Do you think your students are concerned about foodborne illness?
Lesson Overview

Food Illness Outbreak Prevention & Detection

Students will assume the role of a Foodborne Illness Investigator (FBII)

Part 1: Identifying the Outbreak
Part 2: Determine the Food Causing the Outbreak
Part 3: Determine the Source of Contamination

Develop a 4'C Safety Guide for a chosen meal
Breakout share-out

1. Give an overview of what you do during your section of the simulation

2. Could your section be a stand alone lesson or do you think it needs to be combined with additional sections to make sense to your students?

3. What challenges do you see your students face doing this section of the simulation?
4 C’s Cook, Clean, Chill, Cross Contamination Prevention

Steps to Ensure Food Safety

**Chill**
- Keep meat, poultry, and seafood refrigerated until ready to grill. When transporting, keep below 40°F in an insulated cooler.

**Cook**
- Use a food thermometer to ensure meat is cooked hot enough to kill harmful germs. When smoking, keep temperature inside the smoker at 225°F to 300°F to keep meat at a safe temperature while it cooks.
  - 145°F – beef, pork, lamb (not roasts), veal, veal trimmings
  - 160°F – hamburgers and other ground meats
  - 165°F – poultry

**Clean**
- Wash your hands with soap before and after handling raw meat, poultry, and seafood. Wash work surfaces, utensils, and the grill before and after cooking.

**Don’t cross-contaminate**
- Throw out marinades and sauces that have touched raw meat juices. Put cooked meat on a clean plate.

**Refrigerate**
- Divide leftovers into small portions and place in covered, shallow containers. Put in freezer or fridge within two hours of cooking (one hour if above 90°F outside).
Distances teaching challenges

- Is there a way to facilitate this lessons for students that do not have internet access?
  - 4C’s poster
  - Case study
Extensions for distance learning

- Case study on food safety: [https://www.fda.gov/food/students-teachers/science-and-our-food-supply](https://www.fda.gov/food/students-teachers/science-and-our-food-supply)

- CDC foodborne illness factsheet: [https://www.cdc.gov/foodborneburden/PDFs/FACTSHEET_A_FINDINGS.pdf](https://www.cdc.gov/foodborneburden/PDFs/FACTSHEET_A_FINDINGS.pdf)

- eLearning alternative case study: [https://naitcapi.usu.edu/media/uploads/2016/06/15/Heres_What_the_Public_Health_Officials_Did.pdf](https://naitcapi.usu.edu/media/uploads/2016/06/15/Heres_What_the_Public_Health_Officials_Did.pdf)
Thank you for attending!!

- Questions?

- PDU will be sent to each attendee if registered through Ideal-Logic. If you do not receive a PDU please email us at precollege@oregonstate.edu

- We have sessions every Tuesday from 10-11am PST register here: https://precollege.oregonstate.edu/virtual-professional-development-teachers