Video transcript: Cooking Safely for a Crowd

Slide # 1
It's scary to think that people might get sick from the food you serve at a large group event, but it can and does happen! Each year over 76 million of us suffer from foodborne illnesses. While a foodborne illness can be as mild as a stomach ache, it can also be fatal, or it can cause long-term disabilities.

Slide # 2
I'm Lou Ann Jopp, Food Science Educator with the University of Minnesota Extension from the St. Cloud Regional Office. Welcome to the Cooking Safely For a Crowd presentation.

Slide # 3
The major goal of this presentation is to keep people from getting sick, with a foodborne illness, from food you serve them. It is designed to help anyone who plans prepares or serves food for a large group of people.

It includes practices and ways to help keep food safe for those that eat at your events. This may be:

- a family reunion or graduation party
- a church dinner a funeral lunch
- or a community gathering, such as a dinner provided as a fundraiser

Slide # 4
You may be a good cook, but cooking for a large group of people is different! For example – think about preparing and handling 1 turkey – purchasing and transporting 1 turkey is usually not a problem. Think about how you keep it cold where and how long it takes to thaw what you need for roasting equipment how you will be serving the turkey and how you cool the leftovers.

Now think about these same things when you are going to be serving 9 or more turkeys. It definitely is different and takes much more planning and coordination plus more workers.

Slide # 5
What is a foodborne illness? Often referred to as food poisoning. By definition it is an illness caused by consuming food or beverage that contained a contaminant. The general symptoms of a foodborne illness are vomiting, diarrhea, nausea, fever or chills—often mistakenly called the stomach flu.

A contaminant could be:

- chemical—for example the chlorine bleach you use in a sanitizing solution accidently gets spilled into your food
• it could be physical—which could be someone’s hair. While none of us like finding someone’s hair in our food that may not be as detrimental as glass from a broken light bulb that broke in your storage area and got into some food.

The major cause of foodborne illnesses is biological—which include viruses and bacteria. The harmful ones are called pathogens and that is the term I will be using throughout the rest of the presentation. Many pathogens can make people sick, but you cannot see, smell or taste them.

Slide # 6
Do you think you have ever had a foodborne illness? Foodborne illnesses really do happen.

Every year well over 76 million people become ill from a foodborne illness 5000 - 9000 people die.

Think about it. Would that many people eat something if they thought it tasted, looked or smelled bad? Even if tasting would tell, a tiny bit can make you sick. If a food is contaminated with a pathogen, it can take from 1 hour to 6 weeks to become sick.

325,000 people are hospitalized with a foodborne illness every year and this has a big impact on our economy.

Research is also finding that about 2-3% of these illnesses will lead to a secondary long term illness.

Slide # 7
What are some of these secondary illnesses?
• E-coli 0157:H7 can lead to kidney failure especially in infants and children
• Salmonella can lead to arthritis
• Listeria can cause meningitis and stillbirths
• and Campylobacter is known to cause Guillian-Barre syndrome also known as French polio

Slide # 8
So why do you need to know—or care—about food safety? Food that is not handled properly can cause very serious illnesses for anyone of us, but 4 groups of people are at especially high risk. Do you ever feed any of these folks at your events?
• young children
• older adults—and that is anyone over 65
• pregnant women
• and anyone who has a weakened immune system
• that could be someone going through chemotherapy or radiation
• or someone with diabetes or kidney disease
• It could be people taking certain medicines
• or folks who are seriously ill

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Because these high risk groups are often a part of our large group meals, it means we need to be especially careful when preparing and serving food where they may be eating.

**Slide # 9**
Food safety begins when you are planning your large group event.

Be prepared. Think through your equipment and space needs. For example: If oven space is limited, you do not want to plan a menu consisting of roast meat, baked potatoes and hot apple pie—all needing oven space. If there is limited refrigerator space that may determine the type or number of salads to be served.

Also figure in the time factor. Remember it takes a lot longer for 10 quarts of water to boil than it does 2 quarts.

Do you need any kind of license? Check with your Local Environmental health department. Obtaining the correct license helps to protect your organization and assures that you are using the best food safety practices—and yes Churches sometimes need to have a license—especially if you are selling food to the public.

Always have a reliable person in charge of a large group event. Someone that will oversee all aspects of the meal and that knows food safety practices. When you have other people helping with any large group meal be sure to provide them with specific directions. Don't assume everyone knows food safety practices. The best method for these directions is to have them in writing. Better yet, if possible have training sessions for your volunteers.

**Slide # 10**
The temperature of the food is critical for food safety. This thermometer shows the Temperature Danger Zone which is 40 degrees F to 140 degrees F. This is the range of temperatures you want to keep perishable foods out of.

Thus, to keep cold foods cold they need to be 40 degrees F or below and to keep hot foods hot they must be 140 degrees F or above.

**Slide # 11**
Time is also very important to food safety. The 2 hour rule states that perishable food should not be in the danger zone (40 degrees F to 140 degrees F) for more than 2 hours, and if the weather is 90 degrees you only have 1 hour. These are the temperatures at which pathogens grow and multiply the fastest. Any food left in the danger zone for more than the 2 hours should not be eaten.

**Slide # 12**
Keep food safety in mind when you are shopping at the grocery store or market. Do not purchase canned goods that are dented, cracked or bulging as these might be warning signs of dangerous pathogens growing inside the can. In your shopping cart, separate raw meat, poultry and seafood from other foods—especially any ready to eat foods like baked products or fresh fruits and vegetables. To help guard against cross contamination, put raw meat and poultry into a plastic bag so meat juices won't drip on other foods that will be eaten raw.

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Slide # 13
Remember the temperature danger zone and the 2 hour rule even when transporting food in your car. Keep any perishable items inside the air conditioned car—not in the trunk. Take a cooler with ice or frozen gel packs along if you have a distance to travel or it is a hot summer day. Keep your vehicle clean and free of possible contaminants and remember that food and animals should not be transported together.

Slide # 14
Storing your food at the correct temperature is important. To be certain you are keeping your food out of the temperature danger zone when it is stored in the freezer or refrigerator you will need to use an appliance thermometer.

Your freezer should be at 0 degrees F or lower. To keep the food in the refrigerator at 40 degrees F or lower the interior temperature in the refrigerator would generally need to be about 38 degrees F.

To check the temperature place the appliance thermometer in the warmest part of the refrigerator which is usually close to the door and away from the cooling/freezing unit.

Slide # 15
A high percentage of the foodborne illness outbreaks in Minnesota every year are caused by people—those handling the food. Anyone who handles food for others should:

- Shower or bathe daily
- Wear clean clothing
- Keep fingernails short, clean and free of polish or false fingernails
- Not wear jewelry
- and do not handle food for others if you are ill with vomiting or diarrhea—these are often symptoms of Norovirus.

Slide # 16
The transmission of Norovirus is currently the number 1 cause of foodborne illness outbreaks in Minnesota. It is often mistakenly referred to as the stomach flu. Symptoms include vomiting, diarrhea, and stomach cramping—same as foodborne illness, right? Norovirus is found in the stools and vomit of infected people and then it is spread to food, water or surfaces by our hands. Good handwashing can help prevent the spread of Norovirus. It is very contagious!

Slide # 17
The disgusting part of foodborne illnesses is that the pathogens can pass out of us in our feces and can survive on our fingers and hands unless hand washing is very thorough. They can then get into your food if someone with unwashed hands touches your food, beverage, plate, fork, etc. Proper and frequent handwashing is a key to food safety!

When and how should we wash our hands?

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Slide # 18
Wash your hands before preparing food; after using the restroom or changing diapers; after handling animals; after carrying boxes or cans of food or touching garbage; after touching your hair or body; after coughing, sneezing, blowing your nose; after shaking hands, using the phone, handling money; after going from a raw product to a ready to eat product—for example: cutting up a raw chicken and then making a sandwich.

Remember to wash and rewash your hands often!

Slide # 19
This poster shows the proper techniques of handwashing.

The first step is to wet your hands using water between 70 and 110 degrees F.

Step 2. Apply soap—and it doesn't matter what kind, as the soap just makes it slippery for the pathogens to wash away

Step 3. The most important step: scrub for at least 20 seconds. You will need to figure out something that will take that amount of time for you. Some examples are:
   - Sing Happy Birthday to yourself
   - Say the a,b,c’s count whatever will take you 20 seconds

Step 4. Rinse your hands with warm/hot water

And the last step—dry your hands on a paper towel that can be thrown away.

Slide # 20
Single use gloves can help keep food safe by creating a barrier between hands and food but they are not a magic bullet for food safety, nor are they a substitute for hand washing. Before putting gloves on you must wash your hands thoroughly. You must change them often. Never re-use them! If you are the person in charge of a group of volunteers be sure to have single use gloves available and—very important—provide different glove sizes and to be on the safe side provide gloves made from materials other than latex, for those who are sensitive to latex.

Slide # 21
Use hot, soapy water to wash food contact surfaces such as countertops, cutting boards, as well as dishes. Wash these things after preparing each food item and before you go on to the next.

A solution of 1 tablespoon of unscented, liquid chlorine bleach and 1 gallon of water may be used to sanitize washed surfaces and utensils.

Slide # 22
Wash all fruits and vegetables that will be consumed raw. This includes foods like bananas, oranges, melons—those where the rind will not be consumed but surely carry a great deal of pathogens. Wash them under cool running water. Do not use soap, bleach, vinegar, etc.
Slide # 23
The thawing of frozen foods should be done:

In the refrigerator—think about those 9 turkeys—how will you thaw them?

Or under cool running drinkable water, 70 degrees or lower

In the microwave, but then you must continue to cook the food immediately

Or as part of the cooking process

Never thaw food on the counter.

Slide # 24
Cross-contamination is also a cause for foodborne illnesses. Cross-contamination is when pathogens are transferred from one surface to another. Using separate cutting boards and other equipment helps prevent cross contamination.

For example here the white board would only be used for raw meat and the yellow one for raw vegetables.

Keep raw and cooked foods separate in storage areas too.

Slide # 25
It is good to have cutting boards that can be washed in a dishwasher where the temperature is higher than one could handle in a sink.

Slide # 26
The only way to know the temperature of your food is to check with a food thermometer. Insert the thermometer into the thickest part of the food.

You cannot use visual cues to determine whether food has been cooked to a safe internal temperature.

Slide # 27
These examples of ground beef patties show this point very clearly. According to the USDA, 160 degrees F is the safe internal temperature for ground beef. Which patties look done? Which patties are actually safe to eat?

Slide # 28
Meat may be contaminated with e-coli 0157:H7 pathogens from animal feces during slaughter. This makes meats, particularly ground meats like hamburger, unsafe to eat when undercooked.

Slide # 29
If you are using a digital thermometer wait until the dial stabilizes and then compare to the USDA's recommended minimum internal temperatures. For all poultry the minimum internal temperature is 165 degrees F.

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Slide # 30
Keep hot foods hot. Once the food has reached the minimum internal temperature keep it at 140 degrees F or above and keep checking the temperature.

Slide # 31
When cooling foods, once again remember the 2 hour rule and the danger zone temperatures. Divide food into shallow pans no more than 2-3” in depth. Divide foods like a turkey or a large roast into small portions. To quickly cool foods like soups or stews, place the containers in ice water and stir to help the product cool faster. Metal containers cool food faster than glass or plastic.

Slide # 32
When you are trying to hold foods, maybe it is on a buffet table, remember the 2 hour rule! Think about it and plan ahead of time how you will keep cold foods at 40 degrees F or lower and/or hot foods at 140 degrees F or above.

Here is an example of keeping cold foods cold—but remember you still need to use a food thermometer and be certain that the food itself stays 40 degrees or below.

Notice the ice and covers that will help in keeping the food colder longer. Having smaller containers on the serving table will also mean that the food will be consumed sooner and may not reach the danger zone. Do not add new food to a serving dish that already contained food, if it has been sitting in the danger zone for awhile. Instead replace empty platters/bowls with freshly filled food and of course you need to keep checking and monitor the temperatures.

Slide # 33
Serving can also contaminate food. When you serve food avoid touching any surface that comes in contact with food. Remember you need to train your servers in food safety practices too!

Slide # 34
To summarize, the keys to a successful large quantity meal are:
  * Plan, plan, plan—and remember the details
  * Keep everything and everyone clean
  * Remember the temperature danger zone and the 2 hour rule
  * And then prevent cross contamination from taking place

Slide # 35
It doesn’t matter what the occasion is, who you're serving or what you are serving, what matters is that you handle food safely!