



Preventing Foodborne Illness in Food Service Settings:

Pest Control Proper Preparation and Personal Hygiene!

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Topics

- Pests and pathogens.
 - And what illnesses those pathogens cause.
- What's causing illness in food service settings.
- Preventing problems.

- Questions.
 - Please ask questions during this talk.
 - This topic can be very **tedious** and **boring**.
 - Also note: if you start checking your cell phone regularly I will pick on you and ask you questions to embarrass you in front of the group. Are you reading this? You should be listening to Adam!

Pests and Pathogens

FLY GUY

BUZZ!



Pests and Pathogens

- Flies collect pathogens on their legs and mouths when females lay eggs on decomposing organic matter such as feces, garbage and animal corpses.



Pests and Pathogens:

The foodborne pathogens.

- Roaches
 - *Salmonella*, *Shigella*, *Staphylococcus aureus*, *Bacillus cereus*, *Clostridium perfringens*, *Campylobacter* spp., *Toxoplasma*, etc.
- Birds
 - *Salmonella*
- Mice/Rodents
 - *Salmonella*, *Escherichia coli*, viruses

If a pest can touch food OR something OR someone that then touches food, things can go horribly wrong!



But.....

What causes the most illnesses in food service settings???



What causes foodborne illness in foodservice settings?

- *Norovirus*
 - *Hepatitis A*
 - *C. perfringens*
 - *S. aureus*
-
- *For the most part* these are not directly linked between poor pest control and outbreaks of illness.

What causes foodborne illness in foodservice settings?

- *Norovirus*
 - *Hepatitis A*
 - *C. perfringens*
 - *S. aureus*
-
- *For the most part* these **ARE** directly linked to poor hygiene, temperature abuse and cross-contamination.

What can YOU do?



Prevention - What YOU can do.

- Check
 - Bruises, cuts, rot, shelf-life, package info
- Clean
 - Rinse fruits and vegetables.
 - Do NOT wash/rinse meats – the risk is greater of splashing bacteria around.
- Separate
 - Keep ready-to-eat foods (including your raw veggies) away from raw foods.
 - Don't cross-contaminate.



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Prevention - What YOU can do.

- **Cook** your food the correct temperature:

Category	Food	Temperature (°F)	Rest Time
Ground Meat	Beef, Pork, Veal, Lamb	160	None
	Turkey, Chicken	165	None
Fresh Beef, Veal, Lamb	Steaks, roasts, chops	145	3 minutes
Poultry	Chicken & Turkey, whole, thighs, wings, legs, breasts	165	None
	Stuffing (cooked alone or in bird)	165	None
Pork and Ham	Fresh pork	145	3 minutes
	Fresh ham (raw)	145	3 minutes
	Precooked ham (to reheat)	140	None
Eggs & Egg Dishes	Eggs	Cook until yolk and white are firm	None
	Egg dishes	160	None
Seafood	Fin Fish	145 or cook until flesh is opaque and separates easily with a fork.	None
	Shrimp, lobster, and crabs	Cook until flesh is pearly and opaque.	None
	Clams, oysters, and mussels	Cook until shells open during cooking.	None
	Scallops	Cook until flesh is milky white or opaque and firm.	None

Prevention - What YOU can do.

- **Maintain** your food at the correct temperature:
 - Use a food thermometer – *please*.....



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The image shows a Taylor Dial Roast Meat Thermometer. The dial has a scale from 140 to 200 degrees Fahrenheit. The needle points to approximately 175 degrees. The dial is divided into sections for different meats: Turkey, Pork, Lamb, Beef, and Ham. The needle is currently in the 'LAMB' section, pointing to the 'MEDIUM' mark.

Prevention - What YOU can do.

- **Cool** your food quickly and properly to $\leq 40^{\circ}\text{F}$
 - Cool foods within 2 hours after cooking
 - Room temperature foods = bacteria party!



- If you can't cool it down immediately, hold at least at 140°F
 - (bacteria can't grow at this temperature).

Prevention - What YOU can do.

- **Throw spoiled or past-shelf-life foods away!**
 - In some cases, that shelf-life is determined based on product safety.
 - USDA Alternative status and *L. monocytogenes* control.
 - Pre-washed lettuce mixes.
 - Soft cheeses.



Prevention - What YOU can do.

- **Don't cross-contaminate!**
 - Keep raw foods away from ready-to-eat foods.
 - Use separate utensils, cutting boards, gloves, etc. for preparing foods.



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WASH YOUR HANDS!!!!

NOROVIRUS



YOU DONT WANT IT

Summary

- Pest control IS critical in maintaining cleanliness and eliminating introducing pathogens into kitchens.
- The information you learned from ServeSafe, FDA Food, etc. code certainly goes A LONG way to keeping food safe.

Questions?



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