**Chapter 1**

Foodborne Illness= disease transmitted to people by food

It is considered an outbreak when:

* 2+ people have the same symptoms after eating the same food
* An investigation is conducted by state and local regulatory authorities
* It is confirmed by a laboratory analysis

Some challenges to food safety might include:

* Time
* Language and culture
* Literacy and education
* Pathogens
* Unapproved suppliers
* High-risk customers (i.e. elderly)
* Staff turnover

Costs of foodborne illness:

* Increase insurance premiums
* Decreased customers and sales
* Worse reputation

Contaminants are divided into 3 categories:

1. Biological (pathogens and harmful plants, mushrooms, and seafood that carry harmful toxins)
2. Chemical (if used incorrectly)
3. Physical (foreign or naturally occurring objects…like metal or fishbones)

Biological contaminants (bacteria, viruses, fungi, parasites) are responsible for most foodborne illness.

5 most common food handling mistakes/risk factors

1. Purchasing food from unsafe sources
2. Failing to cook food correctly
3. Holding food at incorrect temperatures
4. Using contaminated equipment
5. Practicing poor personal hygiene

Practices related to foodborne illness/how food becomes unsafe:

* Time-temperature abuse
* Cross-contamination
* Poor personal hygiene
* Poor cleaning and sanitizing

TCS Food= Time and temperature control for safety

Ex. Milk and dairy products, meat, fish, baked potatoes, sliced melons, cut tomatoes, poultry, shell eggs, shellfish and crustaceans, sprouts

Ready to eat food= Food that can be eaten without further preparation

Ex. Washed produce, deli meat, bakery items

TCS and ready to eat foods are the most likely types of foods to become unsafe.

Populations at high risk for foodborne illness:

* Elderly people
* Preschool aged kids
* Immuno-compromised people

Agencies such as FDA, USDA, CDC, and PHS assist in inspecting and regulating food safety

* FDA inspects all food except meat, poultry, and eggs. It also regulates food transported across state lines. FDA released a *Food Code* for city, county, state, and tribal agencies. The *Food Code* applies to restaurants, vending operations, schools, day cares, hospitals, and nursing homes. The FDA cannot require state to adopt its *Food Code,* but it strongly encourages it.
* USDA inspects and regulates meat, poultry, and eggs. It also regulates food that crosses state boundaries or involves more than one state.
* CDC and PHS assist the FDA, USDA, and state and local health departments. They also conduct research into the causes of foodborne illness outbreaks and conduct investigations.

Regulatory authorities have the following responsibilities related to food safety:

* Inspecting operations
* Enforcing regulations
* Investigating complaints and illnesses
* Issuing licenses and permits
* Approving construction
* Reviewing and approving HACCP plans