



## **Foodborne Illness**

This section covers the many hazards and opportunities for foodborne illness in our kitchens and meal service. It highlights key points for identifying and eliminating these hazards and tools and tips for keeping food safe. Safe food that is fresh and properly prepared and served entices our customers to return time and again to our school restaurant.

# Microbe Menaces!

## Rules to prevent foodborne illnesses



### LESSON Content

- What food borne illness is
- Causes of foodborne illness
- The “Three C’s” of food safety



### LEARNING Objectives

- Participants will learn to identify causes of foodborne illness
- Participants will be able to correctly recite the “Three C’s”
- Participants will know how to prevent foodborne illness in the kitchen



Lesson TIME: 10 minutes

Preparation TIME: 20 minutes to review the script and make copies of handouts



### MATERIALS Needed

- Overhead projector (or handouts), flip chart or writing board
- Handouts: Foodborne Illness  
Remember the “Three C’s” of food safety



### SCRIPT

The script on the following pages is provided for your use. Notes to you are in ***bold italics*** – they are not part of the script. Handouts can be made into transparencies or copied and distributed along with your talk.



Today we will talk about foodborne illness (commonly referred to as food poisoning) and how we, as foodservice employees, can prevent it from occurring in our school.

Foodborne illnesses are caused by foods that contain bacteria or other microorganisms that are harmful to the human body. Foodborne illness can make people, especially young children, very sick. In fact, it can be fatal. Bacteria and other microorganisms are everywhere. They can be found in the soil, in saliva, under your fingernails, on a doorknob or a towel.

No one can see bacteria without a microscope. The food may look, smell and even taste the same as food without bacteria. That's why our food handling practices are so important.

Most foodborne illnesses are caused by a relatively small number of microorganisms. *(Display or hand out "Foodborne Illness")* When allowed to grow and spread to prepared foods, these invisible invaders can become a serious health hazard. These potentially harmful microorganisms include bacteria, such as "Cocky E. Coli" (*Escherichia Coli* – pronounced *esh-ar-ik'-eeya coii*), "Brazen Botchy" (*Clostridium Botulinum* pronounced *klos-trid'-e-um boch-uh-li'-num*), "Pesky Perfy" (*Colistridium Perfringes* pronounced *klos-trid'-e-um per-frin' jenz*), "Savage Sam" (*Salmonella* pronounced *sal-rnuh-nel'-uh*) and "Sinister Staph" (*Staphylococcus Aureus* pronounced *staf-uh-luh-kok'-us or'-e-us*); viruses seen here like "Voracious Virus"; parasites including "Tricky Trichinella" (*Trichinella Spiralis* pronounced *trik-uh-nel'-luh*); and fungi, such as yeasts and molds seen here as "Frightening Fungi." Bacteria cause most foodborne illnesses.

Our job is to be sure our food service process is safe and sanitary. We can do this by identifying the factors that contribute to foodborne illnesses. Let's do some brainstorming and come up with some likely causes of food poisoning. *(Use an overhead projector or flip chart and write down the group's ideas.)*

You have just identified many possible causes of foodborne illness. Let's talk about other causes not discussed. *(Make sure that the following are mentioned in the brainstorming session or discussion:*



- 
- 
- Food can become contaminated when it is received, prepared or served.
- People can transmit organisms from their bodies to food by touching, coughing or sneezing.
- Unsanitary work areas and equipment can contaminate food.
- Disease-spreading pests, such as mice and flies, may infect food.

Let's move on and consider how we can prevent foodborne illnesses from occurring. It's quite easy if we remember the "Three Cs": Clean, Cold and Cooked. (Display or hand out "Remember the Three Cs of Food Safety.")

**Clean means something is free of soil or dirt.** Good housekeeping, proper personal hygiene and sanitation of equipment and utensils are ways to keep the food preparation, storage and meal service areas clean. Sanitizing, on the other hand, means reducing harmful microscopic organisms to safe levels. These organisms can easily go unnoticed on hands and food contact surfaces that appear clean but aren't sanitary.

**Cold means storing food at the right temperatures to stop the growth of bacteria and other organisms.** Although these microorganisms survive in the refrigerator or freezer, they generally can't reproduce at temperatures below 40°F.

**Cooked means bringing foods to a high internal temperature while cooking (165°F) and holding cooked foods at a high temperature to keep them safe (140°F).** *(State and local agencies may require foods to be held at higher temperatures. Be sure to follow the guidelines established by your state, county or city health agencies.)*

It's easy to remember the most important temperatures. Store foods at or below **40°F** and heat and hold foods at **140°F** or above. **The danger zone is between 40°F and 140°F.**

Now let's spend a few minutes discussing precautions we've taken to eliminate potential causes of food poisoning in our kitchen. What else can we do to eliminate potential problems?

FOODBORNE Illness is caused by food that contains bacteria or other microorganisms that are harmful to the human body. Here are the Primary Culprits!



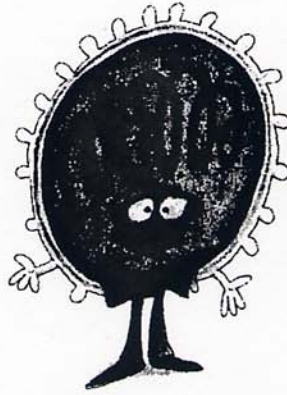
"Tricky Trichinella."  
(*Trichinella*)



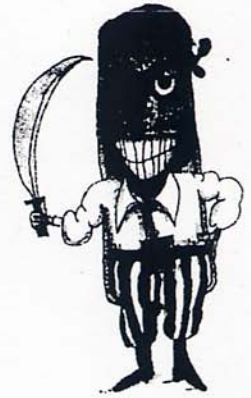
"Cocky E. Coli"  
(*Escherichia coli*)



"Brazen Botchy"  
(*Clostridium botulinum*)



"Voracious Virus"  
(*Virus*)



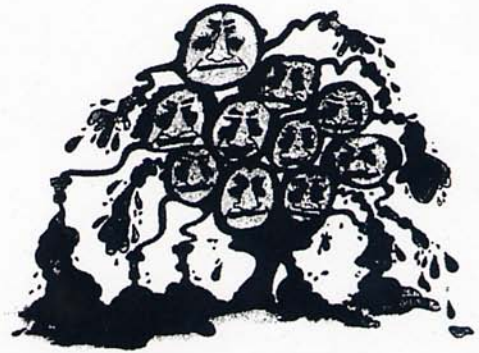
"Pesky Perfy"  
(*Clostridium perfringens*)



"Savage Sam"  
(*Salmonella*)



"Frightening Fungi"  
(molds & yeasts)



"Sinister Staph"  
(*Staphylococcus aureus*)

Source: Serving it Safe, page 33

REMEMBER the “THREE C’s” of Food Safety

COOKED

COLD

CLEAN

Source: Serving it Safe, page 38