**FOOD SAFETY MANAGER CERTIFICATION**
**VIDEO CAPTIONS FOR THE HEARING IMPAIRED**

**Lesson 2 video**

Biological organisms are living things. They eat, grow, and multiply. They can multiply in food. And they can multiply inside a person after that food has been ingested.

**Lesson 3 videos**

Video #1

Bacterial cell division works something like this:
Take this small dot to be a single bacterium, and that it's a bacterium of a type that can split into two every twenty minutes.
In 40 minutes, there are four.
In one hour, our one cell has doubled to eight.
After five hours...over 32,000 bacteria!
After seven hours, our single bacteria has grown to over two million!
After eight hours...over 16 million bacteria!
After ten hours, it will have spread to over one billion bacteria!

Video #2

Most disease-causing bacteria have a narrow set of environmental conditions within which they can live and multiply. By knowing the factors that increase or decrease bacterial growth rate, we gain ability to decrease foodborne illness. We'll be listing six factors in all.

Video #3

There are four more factors that directly affect the growth rate of bacteria. Four more things to know in order to gain the power to control the harmful bacteria that can contaminate our food.

Video #4

Bacterial Growth Rate and Time: Bacteria can multiply rapidly, but not instantly. They need time to grow to levels injurious to humans.

Video #5

Bacteria growth follows a predictable curve, called the bacterial growth rate curve.

**Lesson 4 videos**

Video #1

(Voice reads the text that is on the screen.)

Video #2

That's what viruses do. They invade living things. They cannot operate or reproduce on their own, but only from within a living cell, such as this bacterium, or the cell of a plant or an animal. Once inside the living cell, the genetic code of the virus takes over, and gets the cell to do its bidding, including making more copies of the virus. This usually damages, or eventually kills the cell, and is the source of viral disease in the host organism.

**Lesson 6 videos**

Video #1
If you cannot avoid a sneeze or cough, always do it away from food, and use a disposable tissue instead of a handkerchief. If a tissue is not available, you can cover your mouth and nose with your upper arm. Never cover your mouth or nose with your hands.
Then, gloves should be changed, and hands should be washed thoroughly with an approved soap before returning to the food preparation area.

Video #2
Sweat can contaminate food. Do not drip sweat onto equipment, food, or food preparation surfaces. Do not wipe sweat away with your hands and then touch the food. Finally, do not wipe sweat with cloths that are used to clean food contact surfaces. Instead, use a disposable towel or napkin to wipe away your sweat. Then remove your gloves, and wash your hands with an approved soap and put on clean gloves. Change gloves regularly to avoid sweat dripping down your arms into the food.

Video #3
No voice.

Video #4
These five steps should be followed to properly wash hands or prosthetic devices.
The Food Code states this process is to take at least 20 seconds.
First, always use warm water that's at a temperature of 100 degrees Fahrenheit or more.
Then, wet hands and exposed arms up to the elbows.
Next, apply the proper amount of an approved hand washing soap, and rub hands and forearms briskly for at least 10-15 seconds to build up a good lather.

Video #5
Pay special attention to areas under the fingernails, on the fingertips, and between the fingers, where contamination is most difficult to remove. Preferably, a single-use or personal nail brush will be used.

Video #6
No voice.

**Lesson 7 videos**

Video #1
When testing the temperature of food with a thermometer, insert the clean probe into the thickest part of the food, which is usually the center, up to the dimple
Wait for the indicator to stop moving. This is typically at least 15 seconds.
Test various parts, since temperatures will vary
Do not touch any bones, or the bottom or sides of the container
Clean with a sanitizer appropriate for food contact surfaces before and after each use, or dip in boiling water for 7 to 10 seconds.

Video #2

To test the temperature of a casserole or the contents of a pot or chafing dish, always insert the thermometer into the center of the dish, again being careful not to touch the bottom or sides of the container.

A thermometer needs to be used to check food deliveries to assure that no temperature abuse has occurred

To test the temperature of vacuum-packed, modified atmosphere packaging (MAP), and sous vide foods, insert the thermometer between two packages

If the package allows, or with bags, wrap the package around the thermometer so that the stem is in the fold. Be careful not to tear the packaging.

Video #3

For products packaged in cartons or bottles such as milk, insert the thermometer into one of the cartons or bottles. Again, being careful not to touch the packaging.

To monitor the temperature of equipment such as ovens or coolers, use a mounted thermometer or a thermocouple or thermistor with an air probe.

Video #4

There are several things to look for that indicate fish is fresh and safe.

Only accept fish that have bright red and moist gills.

The flesh should be firm and elastic when touched, and should not separate easily from the bone.

The fish should have clear, bulging eyes.

The shells of live clams, oysters, and mussels should be closed, or should close when they are tapped.

Video #5

All canned goods must be checked thoroughly before they are received and again just before they are used, since the extremely dangerous botulism toxin can grow in damaged product. Only accept canned goods that are labeled and free of rust and flaws. Reject all cans that are not labeled.

Cans that are dented or broken along the seams are unacceptable, because it's very likely that the product could be leaking or contaminated.

Examine both ends of the can, and press each end separately. If the opposite end bulges, or the pressed end springs back, the can should be rejected. Swollen or rusty cans are unacceptable.

**Lesson 8 video**

Whenever possible, store foods in their original packaging.

Once removed, take special care in repackaging foods for storage.

Use clean, non-absorbent plastic containers.

Cover the container, then label and date the product.

Avoid using glass storage containers whenever possible, since broken glass can easily contaminate foods.

When glass containers are used, always store them on the bottom rack or shelf.

**Lesson 9 videos**

Video #1
It is very important to eliminate the potential for cross-contamination during preparation.
Always use clean, sanitized utensils and cutting boards. Use color-coded cutting boards to make it easier to switch between foods. For example, use one color cutting board for produce and another color for raw poultry. Also, keep raw and ready-to-eat food away from each other by using different preparation surfaces.
Try to prepare raw and ready-to-eat foods at different times.
Avoid cross-contamination by food contact surfaces that raw food has touched. These must be cleaned and sanitized before cooked food touches the same surface.

Video #2
(Voice reads the text that is on the screen.)

Video #3
Food is typically prepared in the Temperature Danger Zone. In most jurisdictions, this is between 41 and 135F. So, tasks need to be completed as quickly as possible since time and temperature are the most important factors to control the level of bacterial growth. It is essential to carefully monitor the amount of time PHF (TCS) are in this zone. One way to minimize the time in the Danger Zone during preparation is to divide food into smaller batches. Only remove as much food from the cooler as you can prep in a short period of time. Immediately return prepped food to the cooler.
Remember: it is not always possible to identify food spoilage by appearance, smell, or even taste.
Bacterial growth may be enough to cause illness after potentially hazardous foods have spent a total of four hours in the Danger Zone, which includes all stages of food handling.
If it exceeds four hours, discard the food. When in doubt, throw it out.

Video #4
To promote rapid cooling, store large portions of leftovers like chili or sauces in shallow pans, since they allow foods to cool faster than deep pans. Stainless steel pans will cool faster than plastic.
Cut larger pieces of meat into smaller pieces, because the thicker the food, the more slowly it will cool.
It is best to store foods in small quantities.
Store leftovers in the refrigerator immediately, above raw foods.
For cold dishes, chill each ingredient before adding it to other ingredients.

Video #5
No voice.

Video #6
Hold cold foods at 41F or below.
All hot foods should be held in equipment that keeps them at the required temperature of 135F or above at all times.
Do not rely on the temperature gauge on a holding unit. Instead, check internal food temperatures with a thermometer every two to four hours. Discard any food that does not meet these holding temperature requirements.
Never add new product to old product that has already been on the holding table.
For hot and cold foods, set out smaller portions on the buffet line whenever possible, to make it easier to maintain the proper holding temperatures.

This can be accomplished by using heat lamps, steam trays, and steam kettles.
Never use holding equipment to heat or reheat foods. Avoid holding heated foods too long.
Check food temperatures frequently, and stir foods to make sure they are a consistent temperature throughout.
Develop policies that ensure all of these practices occur, as well as how long to hold food and when food will be thrown away.

**Lesson 11 videos**

Video #1

(Voice reads the text that is on the screen.)

Video #2

Supplies should be rinsed after each use and stored in a sanitizing solution in different buckets, depending on how they are used. For example, the mops used to clean the floors are in one bucket, and the cloths used to clean the tables and chairs are in another bucket.

**Lesson 14 video**

The goal of this training has been to provide you with the concepts and procedures needed to manage a safe food service operation. However, if these principles of handling food safely are not taught to workers, then this training has little value.