Food Laws and How They Impact Our Health

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INTRODUCTION

"If in doubt, throw it out!" This phrase has been around for many years and so has food borne illnesses. People just seem to ignore this phrase. As a result, each year the number of outbreaks due to food borne illnesses grows and grows. Just recently, after Hurricane Rita in September 2005, the warning of many city health departments echoed this phrase throughout the Gulf Coast Region. Many food service establishments were forced to discard tons of potentially hazardous foods because electricity was shut off for several days and caused food to be stored at improper temperatures. In my classroom, which is set up and operates as a small cafeteria, I lost close to \$1000.00 worth of food because of Rita. I knew power to the refrigerators had been interrupted, but I was not sure of how long this loss of power lasted. Since I had some doubt, I threw out all of the refrigerated and frozen foods. A day later, the City of Houston Health Department called to find out the cost of any food loss that may have occurred. I informed them of the amount and value of the loss. The health officer told me they were required to record this information in their records.

Think about it. What if there were no food safety laws and regulations in America? Focusing only on their profits, food service establishments might not have thrown away their food after a hurricane like Rita or Katrina, especially if they were not sure of how long the refrigeration was shut off. Or what if I received an order of hamburger patties from my supplier immediately following the hurricanes? How would I know if the patties were safe to eat? I would not know if they had been refrigerated the whole time or not. But with government laws and regulations in place, the safety level of those hamburger patties is increased, and I can believe with some certainty that the patties are safe to eat.

According to the University of Maryland Cooperative Extension Program, Americans consume tons of food yearly. Each person consumes approximately 221 pounds of vegetables, 92 pounds of fresh fruit, 112 pounds of red meat, and 233 pounds of milk and cream. Many of us take for granted that the food we eat is safe and will improve our health, not injure it. We expect for our food to be clean and safe to eat when we buy it from restaurants or fast food establishments, and when we buy it from supermarkets, too.

The University of Maryland Cooperative Extension Program further states that in the US, approximately 9,000 deaths and up to 33 million illnesses a year are associated with our food supply. These food borne illnesses cost our society about \$3 billion dollars a year in hospitalization cost and up to \$40 billion in lost productivity because people cannot work if they are sick. Children, chronically ill people, older people, people with weak immune systems, and pregnant women are at risk the most. Lucky for us, each of the causes of food borne illness can be prevented if certain food safety standards are followed. The regulation of and compliance with food safety laws and standards plays a major role in minimizing food borne illnesses and this dramatically impacts our health. In many instances, we do not know that our food has been contaminated until it is too late. This is why we rely on the food laws in our cities and states to protect us. We must also learn to protect ourselves and others by reporting violations of these

laws and regulations to the proper authorities. In order to do this, we must be able to identify the violations so that we report them properly and investigations can be conducted. In this curriculum learning unit students will study the federal, state and city codes to learn what the violations are and how to report them properly.

It is important for students to learn about the government agencies that regulate our food laws so that they will have a better understanding of the issues involved in regulating food and food products in America. Although this certainly enhances students' academic knowledge, the information presented in this unit goes beyond just an introduction or history of food laws but will also make students more aware personally, since the laws and guidelines are written both to help commercial food establishments and the general public in their homes. The regulations spell out specific things that must be done to keep food safe during non-emergency situations and in emergency situations and prevent foodborne illnesses. Upon completion of this curriculum unit, each student will compile two booklets, one for themselves and one for a friend. The booklets will include many things, such as what to do if they have a problem with a food product; who to contact when reporting a complaint; things that can be done to keep food and water after a natural disaster or power outage; hand hygiene in emergency situations; and how to store food and water supplies for emergency use, such as earthquakes and hurricanes.

The curriculum unit will be taught using various teaching strategies, such as teacher-guided discussions and lectures, cooperative peer learning, group presentations, role playing, and case studies. More teaching strategies may be added where necessary as the unit is developed. It will be taught in a way to gain the students' interest and to help them to connect personally. Also other academic skills will be gained, including presenting projects, writing, researching on the Internet, thinking, and problem solving.

A lot of the books I have researched do not provide detailed information on food laws. Consequently, most of the information used in this unit will come from Internet sources. This works out well, since typically most reputable Internet sources have information that is more current than textbooks anyway.

ACADEMIC SETTING

I currently teach Food Production, Management and Services, one of several Family and Consumer Science courses at Phillis Wheatley High School. Food Production, Management and Services is a two-year course that provides occupationally specific training designed to develop knowledge and skills for employment in the area of food production, management, and services. Instruction includes operation and management of food service establishments, marketing strategies, quantity food production skills, food presentation and service techniques, and technology application in the food service industry. Other topics addressed in the course are legal considerations and customer service. This course is designed for eleventh and twelfth grade students only. So, I was thinking of this age group when I created this unit. However, this unit can be adapted in many ways to be taught at many grade levels.

UNIT OBJECTIVE

The primary objective of this unit is for the students to learn the food laws, regulations and standards because knowing will minimize the outbreak of foodborne illnesses in their lives, thus significantly impacting their health. After completion of the unit they will have a guide booklet they can use to access information pertaining to food laws they can use in emergency and non-emergency situations.

CONCLUSION

My hope with this curriculum unit is to teach my students how to take charge of their own health by being informed. I want them to know food laws, regulations and standards because this will certainly help to minimize the outbreak of food borne illnesses in their lives and their families' lives. Some of the laws, regulations and standards include knowing how long food can be stored in the refrigerator and freezer; what to do if they have a problem with a food product; who to contact when reporting a complaint; things that can be done to keep food and water after a natural disaster or power outage; hand hygiene in emergency situations; and how to store food and water supplies for emergency use, such as earthquakes and hurricanes. I believe that the strategies and information I plan to use will grab the students' attention and keep them interested. Hopefully, by the end of this unit the students will be able to compile two booklets, one for them and one for a friend, which will include the things taught in this unit. When the students complete this curriculum unit, I expect them to remember this phrase forever, "If in doubt, throw it out."

UNIT OVERVIEW

Governmental Agencies that Regulate Food in America

Introduction

Before 1906, state and local governments oversaw concerns about food. In 1906, the federal government enacted its first food law and revised it in 1938. The involvement of the federal government began to substitute the regulatory role of state and local food laws but did not totally replace them because the state and local governments were needed for regulation duties because they are physically closer to the industry. So, each level of government is involved in regulating food safety, but much of the direction or leadership comes from the federal government (FDA, *A Guide to Resources*).

In light of the 9/11 disaster, there has been a lot written about food safety in America. Governmental agencies are striving hard to make sure that we continue to have safe food. They even regulate foods that are being imported to America. We know that most of our food laws in the states and locally are based on federal laws; we will discuss two of the major federal regulatory agencies. They are the Food and Drug Administration (FDA) and the Food Safety and Inspection Service (FSIS). Since the city laws are the ones that regulate food establishments more closely, we will study the City of Houston laws in more depth.

I know you are wondering where the states fit in all of this. Well, the states still remain involved in regulating food safety because they assumed this role before the federal government became involved. The states are physically closer to the industry than the federal agencies. Also, the federal government does not have the staff necessary to solely administer the programs. As a result, there is a collaborative and supportive relationship between state and federal agencies responsible for food safety.

The Houston Department of Health and Human Services Bureau of Consumer Health Service

Who regulates the food laws in Houston? The Houston Department of Health and Human Services Bureau of Consumer Health Service is the bureau that regulates food laws in Houston. What does the Houston Food Inspection Program do? According to bureau, its function is to provide a city-wide program for food safety to promote health and to prevent foodborne illness through education, training and regulation. Food dealers are required to get an annual permit from the city before they can operate the food service establishment. They also have to take a course at the department and be tested every three years to be issued a Food Manager's Certificate. Once they meet all the requirements and the city codes are met, they are granted the

permit and the certificate. The certified manager must be on duty at the food establishment at all times that food is being handled.

Every year a sanitarian (food inspector) from the city will visit your food establishment unannounced. The number of inspections you receive a year will depend on your establishment's history. If there is an immediate risk to the safety of consumers, the sanitarian will take action against you and your establishment for violations. The action can include re-inspections, municipal court citations, temporary closures, and product or equipment quarantines and permit suspensions or revocations. To report a violation, call 713-794-9200 for immediate assistance during the weekday and regular business hours. You will be asked to complete a Food Establishment Complaint Intake Form (HDHHSBCHS, *Complaint Intake Form*).

Food and Drug Administration (FDA) of the Department of Health and Human Services

FDA began as the Division of Chemistry and after July 1901, it was named the Bureau of Chemistry. In 1906 it was named, Federal Food and Drugs Act. Then the regulatory functions were added to the already scientific mission. The Bureau of Chemistry's name changed to the Food, Drug, and Insecticide Administration in July 1927. In July 1930 the name was shortened to the present version. FDA remained under the Department of Agriculture until June 1940, when the agency was moved to the new Federal Security Agency. In April 1953 the agency again was transferred, to the Department of Health, Education, and Welfare (HEW). Fifteen years later FDA became part of the Public Health Service within HEW, and in May 1980 the education function was removed from HEW to create the Department of Health and Human Services, FDA's current home (Swann).

FDA is the federal agency responsible for ensuring that foods are safe, wholesome and sanitary; human and veterinary drugs, biological products, and medical devices are safe and effective; cosmetics are safe; and electronic products that emit radiation are safe. FDA also ensures that these products are honestly, accurately and informatively represented to the public (FDA, *What FDA Regulates*). Some of the agency's specific responsibilities include:

<u>Biologics</u> - product and manufacturing establishment licensing, safety of the nation's blood supply, and research to establish product standards and develop improved testing methods.

Cosmetics – safety and labeling.

<u>Drugs</u> - product approvals, over-the counter (OTC) and prescription drug labeling, drug manufacturing standards.

Foods - labeling, safety of all food products (except meat and poultry), bottled water.

<u>Medical Devices</u> - pre-market approval of new devices, manufacturing and performance standards, tracking reports of device malfunctioning and serious adverse reactions.

<u>Radiation-Emitting Electronic Products</u> - radiation safety performance standards for microwave ovens, television receivers, diagnostic, x-ray equipment, cabinet x-ray systems (such as baggage x-rays at airports), laser products, ultrasonic therapy equipment, mercury vapor lamps, and sunlamps, accrediting and inspecting mammography facilities.

<u>Veterinary Products</u> - livestock feeds, pet foods, veterinary drugs and devices.

How to Report Problems with Products Regulated by FDA (FDA, How to Report)

How do I report an emergency? If the situation is an emergency that requires immediate action, such as a case of foodborne illness or a drug product that has been tampered with, call the agency's main emergency number, 301-443-1240. It is staffed 24 hours a day. You also can report emergencies, as well as non-emergencies, to the FDA consumer complaint coordinator in Texas. That phone number is (214) 253-5200 ext. 5233 area. Non-emergencies such as an over-the-

counter medical device that does not work as advertised, can be reported either to the appropriate consumer complaint coordinator or to the FDA office that handles that product.

The Food Safety and Inspection Service (FSIS) of the US Department of Agriculture

The Food Safety and Inspection Service (FSIS) is the public health agency in the U.S. Department of Agriculture responsible for ensuring that the nation's commercial supply of meat, poultry, and egg products is safe, nutritious, and correctly labeled and packaged (FSIS, *About Food Safety and Inspection Service*).

FSIS has been protecting public health since 1906, when the Federal Meat Inspection Act (FMIA) began the real domestic inspection of meat and meat food products in the United States. The Act provided for regular daily sight, smell, and touch inspections in slaughterhouses to detect unsanitary conditions and contaminated products. Poultry inspection began in 1926 on a voluntary basis, and in 1957, Congress passed the Poultry Products Inspection Act (PPIA), which established mandatory, daily inspections of poultry products (FSIS, *Agency History*).

The 1967 Wholesome Meat Act and the 1968 Wholesome Poultry Products Act amended the FMIA and PPIA, extending Federal requirements to imported products and to state meat and poultry inspection programs. These Acts ensure uniformity in regulation of products shipped interstate, intrastate, and in foreign commerce Food Safety and Inspection Service (FSIS, *Agency History*).

The Egg Products Inspection Act of 1970 required USDA to ensure that egg products are safe, wholesome, and accurately labeled. In 1995, responsibility for egg products inspection was transferred from USDA's Agricultural Marketing Service to FSIS (FSIS, *Agency History*).

Another major change to meat and poultry inspection occurred when FSIS published the landmark Pathogen Reduction/Hazard Analysis and Critical Control Point (HACCP) Systems rule on July 25, 1996. Implementation of HACCP was phased in and completed in January 2000. Under HACCP, all slaughter and processing plants are required to adopt a system of process controls to prevent food safety hazards (FSIS, *Agency History*).

Also, the HACCP rule clarifies the respective roles of industry and government in ensuring food safety and, therefore, makes better use of government resources in addressing food safety risks. Industry is accountable for producing safe food. Government is responsible for setting appropriate food safety standards, maintaining vigorous inspection to ensure that those standards are met, and maintaining a strong enforcement program to deal with plants that do not meet regulatory standards (FSIS, *Agency History*).

Responsibilities of FSIS

FSIS inspects the operations of plants processing meat and poultry products as the plants are being operated. A federal inspector or federally-approved inspector must be present when the plant is operating. FSIS inspects the animal before slaughter and the product after slaughter. It also regulates labeling, ingredients, and regulatory compliance. It helps industry and governments prepare for, respond to and recover from natural disasters and other emergencies. Weather related emergencies can cause food safety emergencies. FSIS offers food safety advice to keep food safe in these situations. Its activities safeguard the food supply against intentional contamination (FSIS, *About Food Safety and Inspection Service*).

To Report Problems with Food Products

What can you do? For help with meat, poultry and egg products: call the toll-free USDA Meat and Poultry Hotline at 1-888-MPHotline (1-888-674-6854). In order for the USDA to investigate a problem with meat, poultry or egg products, you must have the following items: the original container or packaging, any foreign object that you might have discovered in the product,

any uneaten portion of the food (refrigerate or freeze it). The information you should have ready for the phone hotline: your name, address and phone number; brand name, product name and manufacturer of the product; the size and package type; can or package codes (not UPC bar codes) and dates; establishment number (EST) usually found in the circle or shield near the "USDA passed and inspected" phrase; name and location of the store, as well as the date that you purchased the product.

You can complain to the store or the product's manufacturer if you do not choose to make a formal complaint to the USDA. If you think you are ill, see a physician. If an alleged injury or illness resulted from use of a meat or poultry product, you will also need to tell the hotline staff about the type of illness, symptoms, time of occurrence and name of attending health professional (FSIS, *Problems with Food Products*).

Emergency Preparedness and Response

Because of the recent natural disasters, Hurricane Katrina and Hurricane Rita, there has been a lot of attention given to food and water safety. So, I chose to pull this section out and make it a separate lesson in my curriculum unit. These are not laws per se, but standards provided by some of the food regulatory agencies that should be used to keep food and water safe in emergency situations. If a flood, hurricane, power outages or other disasters strike your community, you might not have access to food, water and electricity for days, or even weeks. By taking some time now to store emergency food and water supplies, you can provide for your entire family.

Having enough clean water is a top priority in an emergency. A normally active person needs at least 1 gallon of water to drink each day. On hot days you will need twice as much. Children, nursing mothers and ill people will need even more. You will also need water for food preparation and hygiene. So the CDC (*Food and Water Concerns*) suggests that you store a 3-5 day supply of water. That is at least 5 gallons for each person. This water should be changed every 6 months. Store your water in clean plastic, glass, fiberglass or enamel-lined metal containers. Never store your water where toxic substances are stored because vapors from those substances may penetrate the stored water containers. If supplies run low, never limit the water. Drink the amount you need today, and try to find more for tomorrow. On the CDC site, Food and Water Concerns, you will find the following list of safe water sources you can use:

- Water drained from the water heater faucet, if the water heater has not been damaged.
- Water dipped from the tank of the toilet (not the bowl). The water in the bowl can be used for pets. Do not use water that has been chemically treated or "blue" water.
- Melted ice cubes.
- Canned fruit, vegetable juice, and liquids from other canned goods.
- Water from swimming pools and spas can be used for personal hygiene, cleaning, and related uses, but not for drinking.

Also, on the CDC Food and Water Concern site you will find the following list of water sources that you should not use for drinking:

- Radiators
- Hot water boilers (home heating system)
- Water beds (fungicides added to the water or chemicals in the vinyl may make water unsafe for use)

Too, you need to remember that carbonated beverages do not meet drinking water requirements. Caffeinated beverages and alcohol dehydrate the body, which increases your need for drinking water.

In addition to having enough water, you will also need to have enough food. Keep food in a dry, cool, and dark area if possible. Following are more suggestions on how to store emergency food from the CDC Food and Water Concern site:

- A disaster can easily disrupt the food supply at any time, so plan to have at least a 3-day supply of food on hand.
- When storing food, it is not necessary to buy dehydrated or other types of emergency food. Canned foods and dry mixes will remain fresh for about 2 years.
- Certain storage conditions can enhance the shelf life of canned or dried foods. The ideal location is a cool, dry, dark place. The best temperature is 40 to 60°F. Keep foods away from ranges or refrigerator exhausts. Heat causes many foods to spoil more quickly.
- Keep food away from petroleum products, such as gasoline, oil, paints, and solvents. Some food products absorb their smell.
- Protect food from rodents and insects. Items stored in boxes or in paper cartons will keep longer if they are heavily wrapped or stored in airtight containers.
- Date all food items. Use and replace food before it loses freshness.

When food supplies are low, unlike water, you can limit the amount you eat safely. Usually you can live on half the amount you usual eat for several days. Actually, the CDC Food and water site offer the following suggestions for using emergency foods:

- Use perishable food in your refrigerator or freezer before using food in your emergency supplies.
- Discard cooked, unrefrigerated foods after 2 hours at room temperature, regardless of appearance.
- Eat only foods that have a normal color, texture, and odor.
- Discard cans that bulge at the ends or that are leaking.

For emergency cooking you can use a fireplace, or a charcoal grill or camp stove can be used outdoors. You can also heat food with candle warmers, chafing dishes and fondue pots. Canned food can be eaten right out of the can. If you heat it in the can, be sure to open the can and remove the label first. The CDC Food and Water Concerns site provides the following information about utensils needed for preparing food after an emergency:

- Cooking utensils
- Knives, forks, and spoons
- Paper plates, cups, and towels
- A manual can- and bottle-opener
- Heavy-duty aluminum foil
- Gas or charcoal grill; camp stove
- Fuel for cooking, such as charcoal.
- After an earthquake, if you want to use the fireplace, use only after it has been inspected
 for cracks and damage. Sparks may escape into your attic through an undetected crack
 and start a fire.

LESSON PLANS

Lesson 1: The Houston Department of Health and Human Services Bureau of ConsumerHealth Service (HDHHSBCHS, General Information)

Objectives

After completion of this lesson, the student will be able to name the agency that regulates food establishments in Houston; list the requirements to operate a food service establishment in Houston; name who is responsible for food safety in food service establishments; know how to

contact this agency to report a violation; know what information one need to provide when reporting a violation; and complete a sample Food Establishment Complaint Intake Form.

Key Vocabulary Words (HDHHSBCHS, Food Inspection Guide)

- <u>Food establishment</u> means a cafeteria, a restaurant, a retail food store, a temporary food establishment, a mobile food unit, and/or a roadside food vendor or any business that sells or serves food and beverage to the public.
- General Health Violations require the attention of the operator in a timely fashion. Though not having an immediate impact on public health, they may lead to or contribute to more serious health violations (i.e., construction violations).
- <u>Serious Health Violations</u> have a direct impact on public health and must be corrected immediately or within 24 hours. Serious items may, as a group, lead to the closure of a food establishment if not corrected (i.e., temperature problems, filthy food contact surfaces).
- <u>Substantial Health Violations</u> have a direct and substantial impact to public health that the violation must be immediately corrected or the health officer will require the closure of the food establishment (i.e. no water, sewage back up, pest infestation).

Materials and Supplies Needed

Computer, printer, paper, copies of City of Houston Food Ordinance, several serious violations on note cards, a basket, copies of the Food Establishment Complaint Intake Form.

Focus

Ask these questions: Have you become sick from eating food from a foodservice place? Did you know that a foodservice establishment can be held responsible legally for food it serves if someone became ill from eating their food? How would you feel if someone got sick from food because you handled it carelessly?

Instructional Delivery

Teacher will pass out a copy of the table (HDHHSBCHS, *Violations and Details*) that identifies specific substantial, serious and general health violations of the Houston Food Ordinance. Review the laws in the food ordinance that corresponds to each violation on the table. Discuss. Have the students use the Kitchen Compliance Checklist to evaluate the class kitchen for health violations. Let each student discuss his or her findings and state what must be done to correct the problem. Group students into threes or fours. Let them choose a topic from the "Food Safety Tips" (HDHHSBCHS, *Food Safety Tips*) and report their findings to the class. Have each student research The Houston Department of Health and Human Services Bureau of Consumer Health Service web site and find the section called Food Inspection Search. Find an inspection report in one of the three categories: General Health Violations, Substantial Health Violations, and Serious Health Violations. Present the details of the report to the class. Teacher will place several serious violations on note cards, fold up, and place in a basket. Let each student pick a violation from the basket and make a formal complaint using the Food Establishment Complaint Intake Form. For review, look at the CDC site U.S. Foodborne Disease Outbreaks to see foodborne illness outbreaks in other parts of the United States.

Assessment and Closure

Place the frequently asked questions (HDHHSBCHS, *Frequently Asked Questions*) on the board. Have the students answer each question.

Lesson 2: Food and Drug Administration

Objectives

After completion of this lesson, the student will be able to describe how FDA is organized to carry out its mission; describe what foods FDA regulates; state when and how to contact this agency for various problems; and state what must be done for the agency to investigate a problem; know what information one need to provide on the telephone hotline when reporting a problem; and explain how FDA enforces its regulations.

Materials and Supplies Needed

Computer, computer projector & screen, printer, paper, brochure, "FDA: The Nation's Premier Consumer Protection and Health Agency."

Focus

Pass out the brochure "FDA: The Nation's Premier Consumer Protection and Health Agency" downloaded from the FDA *About the Food and Drug Administration* web site. Use this brochure to start the discussion about the FDA. Discuss the different articles in the brochure relating to foods.

Instructional Delivery

After the brochure discussion, present the slide show to get the students motivated and interested in learning more about the FDA. The name of the slide show is: "An Overview of FDA: Protecting Consumers, Protecting Public Health." It can be shown from the site

FDA: About the FDA. The slide describes FDA's public health mission and how the agency assures the safety and effectiveness of a range of products. Discuss key points. Then, let the students tour the web-based course about the FDA. This is a short course where they can learn basic information about FDA and also take a quiz.

Assessment and Closure

Take the quiz on FDA's web site.

Lesson 3: Food Safety and Inspection Service (FSIS)

Objectives

After completion of this lesson, the student will be able to describe FSIS and identify the food the FSIS regulates; state when to contact this agency for various problems; and state what must be done for the agency to investigate a problem; and know what information one need to provide on the telephone hotline when reporting a problem.

Key Vocabulary Words

- <u>Food Recall</u> is a voluntary action by a manufacturer or distributor to protect the public from products that may cause health problems or possible death. A recall is intended to remove food products from commerce when there is reason to believe the products may be adulterated or misbranded.
- <u>Class I Recall</u> involves a health hazard situation in which there is a *reasonable* probability that eating the food will cause health problems or death.
- <u>Class II Recall</u> involves a potential health hazard situation in which there is a *remote* probability of adverse health consequences from eating the food.
- <u>Class III Recall</u> involves a situation in which eating the food will not cause adverse health consequences.

Materials and Supplies Needed

Computer, printer, paper, newsletter from FSIS Food Safety Educator's site, teacher's box of food problems.

Focus

Hold up a copy of one of the newsletters from the FSIS Food Safety Educator's site. Ask students if they have ever seen this newsletter before? How can it help them? Generate a discussion about the newsletter. Have students download and print out a copy for themselves. Discuss some of the articles in the newsletter. Examine some of the past newsletters.

Instructional Delivery

Group students and have each group generate one question to ask Karen from the FSIS *Ask Karen* site. They can ask questions about the prevention of foodborne illness, as well as the safe handling, preparation, and storage of meat, poultry, and egg products. Next, assign different topics from the web on FSIS Food Recalls. Let each student present their topic to the class. Look at and study notification reports issued by FSIS as they relate to recalls of meat and poultry products.

Assessment and Closure

Pick a problem from teacher's box and report the problem correctly.

Lesson 4: Emergency Preparedness and Response

Objectives

After completion of this lesson, the student will explain how to keep food and water safe during an emergency.

Key Vocabulary Words

<u>Safeguard</u> is a precautionary measure used to help prevent accidents.

<u>Weather related emergencies</u> are emergencies that arise because of the weather such as hurricanes, tornadoes, floods, mud slides/landslides, winter storms, droughts and earthquakes.

<u>Emergency preparedness</u> is a plan you have in place for weather related emergencies or nonweather related emergencies whether it is being prepared to leave your home or stay; or whether you have enough food and water for the family to last for several days.

Materials and Supplies Needed

Assortment of containers for storage of water, assortment of food that can be stored safely, computer, printer

Focus

Ask the following questions: How many of your families had an emergency response plan in place when Hurricane Katrina and or Hurricane Rita hit the gulf coast? Did you have food, water and other supplies stored in your home? Did you have an evacuation plan?

Instructional Delivery

Place students in groups of threes. Assign the different topics from the following sites on emergency preparedness and response: CDC Floods, CDC Food and Water Concerns, CDC Hand Hygiene in Emergency Situations, CDC Keep Food and Water Safe after a Natural Disaster or Power Outage, CDC Power Outages, FSIS Fact Sheets on Emergency Preparedness. The

student groups can use PowerPoint presentations, poster boards, etc., to present their topics to the class.

Assessment and Closure

Student will complete two guide booklets for their family and a friend's family, in which they can use to access information pertaining to food laws they can use in emergency and non-emergency situations.

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Excellent site that provides links to a summary of provisions of the Public Laws.