1. A food-borne illness is:

2. Name three common types of food-borne illnesses:
   
   ____________________________
   ____________________________
   ____________________________

3. The symptoms of a food-borne illness include:

4. The four important food safety rules are:
   
   ____________________________
   ____________________________
   ____________________________
   ____________________________

5. Identify at least six food safety mistakes that could have caused the food-borne illness in this video.
   
   __________________________________________
   __________________________________________
   __________________________________________
   __________________________________________
   __________________________________________
   __________________________________________
1. A food-borne illness is:
   An illness caused by eating contaminated food. The source of which is bacteria, or
   toxins produced by bacteria.

2. Name three common types of food-borne illnesses:
   - Salmonella
   - E-Coli
   - Staphylococcus

3. The symptoms of a food-borne illness include:
   Stomachache, vomiting, diarrhea, and nausea (flu-like symptoms).

4. The four important food safety rules are:
   - Clean
   - Separate
   - Cook
   - Chill

5. Identify at least six food safety mistakes that could have caused the food-borne illness in this video:
   - Food was left out on the counter for over 3 hours.
   - Cut-up unwashed vegetables.
   - Did not wash hands or kitchen surfaces.
   - Used the same cutting board for raw meat and vegetables.
   - Sat on the counter with a pet.
   - Refrigerator temperature was 44 degrees.
   - Milk was past the freshness date.
   - Meat juice was dripping on other food in the refrigerator.
   - Coughing and sneezing on food without washing hands.
   - Used dishtowel to wipe up spills on the floor.
   - Hamburger was not thoroughly cooked.
Fahrenheit FACTS

Hot enough to kill most harmful bacteria.

Hot enough to prevent most harmful bacteria from growing.

TEMPERATURE DANGER ZONE
Most harmful bacteria grow best at these temperatures.

REFRIGERATOR TEMPERATURE
Many harmful bacteria still grow but they grow more slowly.

FREEZER TEMPERATURE
Many harmful bacteria live but do not grow.

KEEP FOOD SAFE!
Meat, poultry, fish, dairy foods and fresh vegetables are favorite places for harmful bacteria to grow. These foods must be kept cold enough or made hot enough to stop bacteria from growing.
Hand washing Rap

You gotta' wash your hands, and
You gotta' wash 'em right,
Don't give IN to germs
WITH-out a fight.

Use water that's warm
And lots of soapy bubbles,
These are your weapons
FOR preventing germ troubles.

DON'T cut your time short
Your fingers — GET between,
It takes twenty seconds
TO make sure they're clean.

Gotta' wash... gotta' wash
GOTTA' — wash — your hands,
Gotta' wash... gotta' wash
Gotta' — wash — your — hands.

Note: Words/syllables in heavy green type carry the stronger beat.

Adapted with permission from Michigan State University Extension.
EXPIRATION DATE DETECTIVE

AUG 14 XX
TOP OF BAG OR ENCLOSER
To prevent mold.

BREAD

BEST IF USED BY
5/18/XX
FRONT OF BAG
To keep fresh and prevent spoilage.

FRESH SALAD MIX

EXP DATE
7/21/XX
TOP OF PACKAGE
To prevent mold.

FRONT OF PACKAGE
To prevent mold.

MEAT & FISH

USE BEFORE
MAY 21 XX
TOP OF CARTON
To prevent spoilage.

06/14/XX
FACE OF PACKAGE
To keep effective.

STORE LABEL OR TOP OF PACKAGE
To prevent spoilage & keep edible.

TOP OF CAN
To prevent rancidity.

SEPT XX

TOP FLAP OF BOX
To keep out grain pests.

BEANS

EXP DATE
6/20/XX
TOP RIGHT CORNER OF BAG
To keep fresh and prevent rancidity.

TOP OF BAG OR ENCLOSER
To ensure freshness.

USE BEFORE JAN 30 XX
END OF CARTON

TOP FLAP OF BOX
To keep effective.

FRONT OF PACKAGE
To keep effective.

FLAP OF BOX

EXP DATE
8/XX
MEDICINE

Learning ZoneXpress
Box 1022 • Owatonna, MN 55060
1-888-455-7003
www.learningzonexpress.com
### Store these in the Kitchen Cupboard

- Unopened or Uncooked*: cream of wheat, cornmeal, oatmeal, spaghetti, tuna, salad dressing, bottled or canned juice, canned fruits & vegetables, mayonnaise, tortillas, rice, canned soups
- Fresh Foods:
  - apples
  - blueberries
  - cabbage
  - cantaloupe
  - carrots
  - cheese
  - broccoli
  - cottage cheese
  - eggs
  - grapes
  - lettuce
  - pears
  - milk
  - tomatoes
  - watermelon
  - yogurt
  - chip dip

* Once opened or cooked, these foods must be refrigerated.

### Store these in the Freezer or Refrigerator

- Freeze:
  - ice cream
  - mixed vegetables
  - fish sticks
  - french fries
  - pizza
  - blueberries
  - strawberries

- Once Frozen, Keep Frozen:
  - beef
  - hamburger
  - bacon
  - pork chops
  - turkey
  - chicken

### Leftover Storage Chart

- Cooked Poultry ......................... 2-3 days
- Cooked Meat or Fish ................... 2-3 days
- Cured of Smoked Meats ................. 3-5 days
- Cured Bacon or Ham ................... 1 week
- Ground Meat ............................ 1-2 days
- Leftover Casseroles ................... 2-3 days
- Canned Opened Fruit ................... 3-5 days
- Canned Opened Vegetables ............ 3 days
- Milk ..................................... 5 days
- Cottage Cheese ......................... 2-3 days
- Processed Cheese ....................... 3-4 days
- Puddings ................................ 1-2 weeks
- Margarine ................................ 4-6 months
- Butter .................................. 1-2 weeks

### Suggested refrigerator storage periods for maintaining the quality of foods:

- Cooked Poultry ......................... 2-3 days
- Cooked Meat or Fish ................... 2-3 days
- Cured of Smoked Meats ................. 3-5 days
- Cured Bacon or Ham ................... 1 week
- Ground Meat ............................ 1-2 days
- Leftover Casseroles ................... 2-3 days
- Canned Opened Fruit ................... 3-5 days
- Canned Opened Vegetables ............ 3 days
- Milk ..................................... 5 days
- Cottage Cheese ......................... 2-3 days
- Processed Cheese ....................... 3-4 days
- Puddings ................................ 1-2 weeks
- Margarine ................................ 4-6 months
- Butter .................................. 1-2 weeks

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*Once opened or cooked, these foods must be refrigerated.
WAYS FOOD BECOMES UNSAFE

How Many Can You Find?

1. Food should not be tasted from the serving spoon.
2. Hands should be washed after touching animals before you eat or touch food.
3. Perishable food should not be left on the counter.
4. Food should be protected from insects and properly stored.
5. Germs can spread to foods by sneezing or coughing.

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**Salmonella**  
*Alias: Salmonella Smashers*

**Hideouts:** Raw meats, poultry, eggs, milk, fish, and products made from them.

**Hangouts:** People, pets, insects, and rodents.

**Crimes:** Cause headaches, diarrhea, abdominal cramps, and sometimes vomiting within 12-36 hours.

**To Outsmart Them:**
- Cook foods thoroughly and serve them while they are still hot.
- Keep cooking utensils and surfaces clean while preparing foods.
- Promptly cool or freeze foods after cooking or preparing them.
- Fully reheat stored foods.
- Wash your hands before handling food and eating — as well as after handling raw meat and poultry.

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**Staphylococcus Aureus**  
*Alias: Staph Staff*

**Hideouts:** Moist meat dishes, meat salads, sliced meats, and starchy foods such as eclairs, cream puffs, cake fillings, and potato salad.

**Hangouts:** Nasal passages of humans and animals, and on the skin.

**Crimes:** Cause nausea, vomiting, diarrhea, and severe cramps within 3-8 hours.

**To Outsmart Them:**
- Always have clean hands when handling food.
- Clean cooking utensils and countertops with hot, soapy water.
- Cook foods thoroughly before serving them.
- Cool or freeze foods promptly after meals.

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**Clostridium Botulinum**  
*Alias: Botulism Bunch*

**Hideouts:** Improperly canned foods like meat, poultry, and eggs.

**Hangouts:** Soil, water, produce, and other foods; inside of foods where anaerobic (air-free) conditions can exist.

**Crimes:** The worst of them all. They are rare, but they can kill. Cause weakness, constipation, headache, double vision, and impaired speech, chewing, and swallowing within 12-36 hours.

**To Outsmart Them:**
- Follow recommended guidelines when home-canning.
- Never taste food that smells foul, is in a leaking, bulging, or badly damaged can, is in a cracked jar with loose or bulging lid, or that spurts liquid when it is opened.

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**Clostridium Perfringens**  
*Alias: Perfringens Pack*

**Hideouts:** High protein foods such as meat, poultry, and eggs.

**Hangouts:** Sewage, soil, dust, crops, and poultry.

**Crimes:** Cause nausea and diarrhea, and gas pains within 8-24 hours (usually within 12 hours).

**To Outsmart Them:**
- Cook high protein foods thoroughly.
- Keep foods hot until eaten.
- Refrigerate foods in shallow containers for quick temperature reduction to stop the multiplication of the bacteria.

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**E. Coli 0158:H7**  
*Alias: E. Coli Crew*

**Hideouts:** Raw or unpasteurized milk, and raw or undercooked ground beef.

**Potential Victims:** Everyone — especially the elderly, young children and people who eat in large group settings like cafeterias.

**Crimes:** Cause stomach cramps, nausea, vomiting, diarrhea (often bloody). Complications — urinary tract and kidney infections serious enough to cause death.

**To Outsmart Them:**
- Thoroughly cook meats.
- Do not drink unpasteurized milk.
- Always keep hot foods hot and cold foods cold.
- Always wash your hands before preparing and/or eating food.

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**Listeria Monocytogenes**  
*Alias: Lester the Mean Microbe*

**Hideouts:** Raw or unpasteurized milk and foods made from it, vegetables, meat, fish, poultry, and their products.

**Potential Victims:** Especially pregnant women, infants, elderly and people who are ill.

**Crimes:** Cause fever, chills, backache, stomach pain and diarrhea. Complications may include blood poisoning and death.

**To Outsmart Them:**
- Do not drink unpasteurized milk or eat cheese made from unpasteurized milk.
- Thoroughly cook meat, fish and poultry and their products.
- Always wash your hands before preparing and/or eating food.
- Keep hot foods hot and cold foods cold.
- Do not refrigerate foods for long periods of time.

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