UNDERSTANDING FOOD-BORNE ILLNESS

Commonly called 'food poisoning', food-borne illness refers to any sickness caused by contaminated food or drink. It can include illness from bacteria, viruses, parasites, chemicals, allergies or naturally occurring poisons.

The signs of food-borne illness may not appear right away. It may take several hours, days, or even weeks for symptoms to develop. Common symptoms are diarrhea, nausea, vomiting, cramps, and fever. Most people will recover in a short time without complications. For others, food-borne illness can be dangerous and even fatal.

Food-borne illness can occur as quick as ½ hour or take up to 10 days, or sometimes longer. Most food-borne illness takes 1 to 3 days.

WHY IS FOOD-BORNE ILLNESS SERIOUS?

Costs of Food-borne Illness:

1. Law suits from customers who are ill or from family members of fatalities
2. Bad publicity will result in loss of customers
3. Lost wages and staff shortages by those too sick to work
4. Food-borne illness investigations are time-consuming and expensive
5. Fines issued through courts from Public Health Inspector reports

Causes of Food-borne Illness:

1. Chemical Contamination
2. Physical Contamination
3. Allergens
4. Microbial Contamination (Direct and Indirect)

1. Chemical Contamination

Food-borne illness caused by chemicals is called *food poisoning.* Vomiting usually starts within an hour after eating contaminated food. Other symptoms may include nausea, cramps, and diarrhea.

Types of Chemical Contamination:

I. Metal Food Poisoning

Dissolved metal in food cans cause chemical food poisoning (e.g. acidic food such as spaghetti sauce stored in metal containers and causes the metal to dissolve)

II. Intentional Chemical Additives

Food additives are things added to colour, thicken, firm, or preserve food

III. Accidental Chemical Additives

Poisonous chemicals like pest control products and cleaning chemicals

How to Prevent**:**

- Store chemicals in original containers
- Properly label chemicals if used outside original containers
- Store all chemicals in same place (lock door if required)
- Use cleaning products in accordance with manufacturer's directions
- Store acidic food in glass or food-grade plastic containers
- Never store food in containers used to store chemicals

2. Physical Contamination

Physical objects in food could cause anything from a small cut to broken teeth to possible choking. Examples: stones, dirt, hair, broken glass, band-aids, fingernails, screws, staples, wood, insects, pest droppings, plastic bits, fruit and vegetable stickers, bones or jewelry.

How to Prevent:

- Don't wear jewelry
- Don't wear fake fingernails
- Wear hat or hairnet
- Wear gloves to cover bandages
- Be careful when opening up packages
- Put and maintain protective shields or covers on lights over food storage and preparation areas
- Don't use glasses to scoop ice
- Don't chill glasses or any food items in ice that will be used in drinks
- Don't store toothpicks on shelves above food storage or preparation areas
- Thoroughly scan grain products for field debris such as stones prior to use

3. Allergens

- An overreaction of the immune system to an unwanted substance

- Life-threatening, take no chances. Medical attention is required. Call 911

- An estimated 8% of Canadian population has a food allergy. 1% to 2% of Canadian adults live with the risk of a life-threatening anaphylactic reaction. Start of symptoms to fatal shock can take only 10 to 15 minutes

- Symptoms can include digestive issues (vomiting and diarrhea), respiratory issues (coughing, runny nose, inflammation of airways, low blood-pressure) and skin irritations (hives or rashes).

- For those with food allergies, the key to remaining safe is avoidance of these foods. Consuming even a very small amount of an allergen can cause an allergic reaction. Because of this, it's vital for food service staff to know what's in the food they serve and to be aware of how dangerous allergies can be. Knowing this can save lives.

- If someone asks for a list of ingredients and you are not 100% sure, <u>bring them the original box or container</u>

- Below are top 10 common allergens according to Health Canada. These foods are more likely to cause serious anaphylactic reactions:
  - Peanuts
  - Eggs
  - Milk
  - Tree Nuts
  - Wheat
  - Soy
  - Sesame Seeds
  - Seafood (Fish, Crustaceans, and Shellfish)
  - Sulphites
  - Mustard

<u>How to Prevent</u>:

- ✓ Communication with customers is very important:
  1. Make sure the ingredients on your menus are accurate
  2. Have an accurate and up-to-date recipe binder
  3. If you're not sure what's in a product, say so
- ✓ Educate staff on menu items and on dealing with allergies
- ✓ Make sure customer food doesn't become contaminated by other foods
- ✓ Avoid ingredients known to cause allergic reactions whenever you can
- ✓ If a customer has a severe allergic reaction, call 911

4. Microbial Contamination (Direct and Indirect)

- Microorganisms that make us sick are called pathogens

- Direct transmission is the physical transfer of pathogens from a contaminated source to a susceptible person. An example would be shaking the fecal-contaminated hands of an infected person and later putting your hands to your mouth, eyes, or nose without washing them

- Indirect transmission is the spread of pathogens via an intermediate object like food and water. For example, fecal bacteria like *E. coli* and *Salmonella* can contaminate meats in the animal slaughtering process. Later, if the meat is improperly cooked or handled, food-borne illness can result. In addition, *C. botulinum*, a potentially harmful bacteria found in soil, can contaminate vegetables. If the canning of these vegetables is not carried out properly, this could lead to the potentially deadly illness botulism

  Some organisms can live on objects for a short time. You might be exposed to infection if you touch an object soon after an infected person and you put your hands to your face or eat food before washing your hands. Cross-contamination (which we will later focus on) is a form of indirect transmission

- Pathogens are odourless and tasteless but cause disease

- Spoilage organisms, on the other hand, do cause odours and off-tastes, but may or may not cause disease

- Bacterial illnesses are the most common type of food-borne illness

- **Examples of microorganism sources**: environment (ex. soil, dust), humans, pests, food-contact surfaces, slaughtering practices, improperly washed dishes, improper food storage, contaminated water, cross-contamination (direct and indirect).

Dealing with Complaints of Food-borne Illness

1. Refer the complaint to your manager

2. The manager should get as much information from the customer as possible, including:
    - What/when customer ate, type of symptoms, start of symptoms?
    - Review with staff how the meal was prepared
    - Were there any ill staff working?
    - Save any food samples as this can be tested

3. Call the health department and advise the customer to do the same. Do not give medical advice