

FOOD SAFETY SENTINEL

EMPLOYEE HEALTH AND DISEASE CONTROL

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Fitness for Work!

The health and hygiene of food plant employees should concern every food plant operator. There are several types of communicable diseases that can be transmitted through food. A disease outbreak traced to your facility can seriously damage the reputation of your business and your industry.

The purpose of this issue is to provide information and present measures to minimize the transfer of communicable diseases from food plant employees.

Food plant employees should be "fit for work" at all times. This means that they must not be suffering from, or be a carrier of, an illness or disease that could cause a food safety problem. Also, employees should demonstrate excellent hygiene and follow food safety practices.

Foodborne Illness

What is foodborne illness?

Foodborne illness is a disease resulting from eating a contaminated food. Although commonly known as food poisoning, it is important to understand that foodborne illness is not actually food poisoning. Foodborne illnesses are caused by bacteria, viruses or parasites that contaminate the food, while food poisonings are caused by a poison (toxin) that is present in food at the time of ingestion (for example mycotoxins produced by molds that grow on food).

According to Centre for Disease Control and Prevention, more than 250 different foodborne diseases have been identified. Bacteria, viruses and parasites cause most of them; the rest are usually poisonings caused by harmful toxins that are naturally present in the food (e.g. poisonous mushrooms).

How common is it?

Public health experts estimate that there are between 11 and 13 million cases of food borne illnesses in Canada every year. In Alberta, more than 3000 cases of food borne illnesses are reported annually.

What are the symptoms?

Because microbes or toxins enter the body through gastrointestinal tract, they often cause nausea, vomiting, abdominal pain (stomach cramps), and diarrhea. Foodborne illness can also cause fever, headache, dizziness, jaundice (yellow staining of skin) and tiredness. Because the symptoms are very similar, very rarely is possible to find out what microbe caused a given illness unless laboratory tests are used to determine the microbes, or the illness is part of a recognized outbreak.



- Have been recently exposed to a food borne illnesses e.g. employee lives in the same house with a person diagnosed with a communicable disease, or
- Have been either recovered or had a food borne illness and never presented any symptoms.

The facility operator should exclude any employees who may be suffering from or have the symptoms of a food borne illness from food handling tasks.

Methods of prevention:

- The facility operator and all employees should be familiar with the symptoms associated with a food borne illness.
- Train and encourage employees to report when they have symptoms associated with food borne illnesses. E.g. sore throat, fever, colds or open sores. Help employees recognize and report signs of illness – for example, having to use the restroom often, diarrhea or vomiting.
- Sick employees should not return to work until they have had no symptoms for 48 hours or they present a clearance from the doctor that they do not pose a risk. As an alternative, until they are better, they may be asked to work in an area where they are unlikely to infect co-workers or contaminate food.
- Encourage ill employees to get medical attention. If an employee is diagnosed with a communicable disease, the doctor notifies public health. Should the illness pose any risks to public health, the employee will be asked not to work in a food facility until they are no longer a source of contamination. The food processing facility may be also contacted by the public health agency.
- Ask all employees being hired if they present any sign of a communicable disease transmissible through food. Some food employers require that all employees seek medical clearance before beginning work. Others ask new employees to complete a health declaration form. Some companies require food handlers to report if they have had contact with or exposure to infectious diseases.

Employee Training

Ensure that all employees understand the importance of being "fit for work". Training involves:

- Ensuring that employees understand the relationship between personal hygiene and food safety and know the major causes contributing to food borne illnesses;
- Making employees aware of in-house policies and applicable legislation;
- Ensuring employees understand and follow policies.

FOOD SAFETY SUPPORT

Alberta Agriculture and RURAL DEVELOPMENT has a team of food safety specialists available to assist you to assess and improve your food safety programs.

www.agriculture.alberta.ca/aha

Contact 780-427-4054
or toll free 310-0000.

Improving food safety programs is a good business decision as doing so can:

- enhance food safety, quality and consumer confidence;
- reduce waste and recalls; and
- open doors to additional markets.

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COMMUNICABLE DISEASES SPREAD THROUGH FOOD

Food safety experts have determined that food borne pathogens that are most often transmitted through food from an infected employee are:

- Norovirus
- Hepatitis A virus
- *Salmonella* spp*
- *Shigella* spp
- *E. coli*
- *Staphylococcus aureus*
- *Campylobacter jejuni*
- *Vibrio cholerae*
- *Cryptosporidium* spp
- *Taenia solium*
- *Giardiasis* spp
- *Yersinia enterocolitica*

Any employee who has a doctor diagnosis of any of these illnesses should be excluded from working in food processing facilities until they are recovered. Food plant operators should request that employees obtain clearance from a physician before returning to work. [* species]

Symptoms can start soon after eating contaminated food, but they can also emerge up to one month later. In most cases, people recover after few days but, for young children, seniors, pregnant women and people with weak immune systems, food borne illnesses can be very dangerous.

Contamination

While there are many occasions food can become contaminated during processing, the Centre for Disease Control and Prevention reported that contamination of food by an infected worker is the most common way that food borne diseases are transmitted in outbreaks.

Contamination often happens when employees fail to wash their hands effectively after using the bathroom: microbes from the employee's gastrointestinal tract are transferred to food.

Communicable Disease Prevention

Prevention of communicable disease is an essential part of a successful food manufacturing operation. Personal hygiene, hand washing, employee illness awareness and training are key factors in limiting the spread of diseases within a food-processing environment.

Personal Hygiene Policy

An effective in-house hygiene policy and the related training should prevent the transfer of diseases from known sources of contamination.

An employee hygiene policy should include:

- Hand washing: procedures that describe steps for how and when to wash hands;
- Protective clothing: smocks, footwear, hairnets, gloves, sleeves; Plant specific clothing and footwear prevent contamination;
- Personal cleanliness: short fingernails, no jewelry or other personal effects;
- Personal behavior: eating, drinking and smoking;
- Employee flow: employees should be restricted to their areas of work and procedures should describe the proper flow of employees to avoid contamination due to travel through different work areas;
- Illness and communicable disease: procedures should describe the symptoms, and the risks associated with communicable diseases; also define the rules for reporting illnesses and state the pre-employment condition: free of diseases and doctor clearance if appropriate;
- Injuries: Cuts and abrasions must be covered with waterproof dressing to prevent contamination of food products;
- Blood Contamination: Human blood may be a source of contamination; the hygiene policy should define the procedures for cleaning/sanitizing surfaces/equipment and disposal of products contaminated with human blood; and
- Visitors' Policy: visitors must follow the same rules as employees to prevent contamination of food products.

Hand Washing

Unwashed hands are considered the most significant pathway for pathogen transfer. For this reason, hand-washing procedures should be implemented and strictly monitored.

Personnel responsible for hygiene training must demonstrate proper hand washing practices to employees.

- Thoroughly wash hands and all parts of wrists/arms that are exposed to direct food contact;



- Proper hand washing should take 20 seconds (the time it takes to sing the alphabet);
- Vigorously scrub hands with soap and warm water paying attention to areas between the fingers, wrist, and around and under nails;
- Rinse off all soap with clean warm water; and
- Completely dry hands with a single-use disposable paper towel.

The facility operator should ensure that proper facility, equipment and supplies are provided for employee personal hygiene:

- Ensure that toilet facilities are always clean and in good repair.
- Provide adequate hot and cold running water supply.
- Provide soap and single use towels (best practice is to use hands-free dispensers).
- Provide hands-free hand-washing sinks in all food handling areas. These must be conveniently located and accessible at all times.
- Post signs to remind employees about hand washing and proper practices.

Common sense indicates that hands should be washed before handling food, but there are many occasions when hands must be washed when working in a food-processing environment:

- Immediately before food handling;
- After touching body parts;
- After using washrooms;
- After coughing, sneezing or using a tissue;
- After changing tasks, especially if switching between working with raw meat and working with ready to eat or cooked foods;
- After handling garbage or inedible tools/equipment;
- After touching dirty surfaces;
- After picking up something from the floor; and
- After engaging in any activity that contaminates hands.

Employee with Illness

The greatest risk to consumers occurs when food plant employees have specific symptoms of a communicable disease yet continue to work with exposed food.

There is a risk of spreading a communicable disease if employees:

- Have one or more of the symptoms that are associated with a gastro-intestinal disease: diarrhea, vomiting, nausea;
- Have been recently diagnosed with a food borne illnesses;

SUPERFICIAL AND SURFACE INJURIES

Superficial or surface injuries (e.g., cuts, scratches, boils, sores and skin infections) can be a source of contamination. Injuries should be covered with bandages well as waterproof coverings (i.e. gloves).

BLOOD CONTAMINATION POLICY

The purpose of this policy is to limit food product and employees exposure to human blood. Policy should include:

- Reporting procedure for all blood related incidents immediately to reduce the scope of possible contamination;
- Procedures to determine if product is affected;
- Procedures to dispose of all food products that have been exposed to blood;
- Procedures of how to clean and sanitize all contaminated surfaces, tools and equipment before resuming work; and
- Policy to ensure that employees contaminated with human blood change into clean clothing before resuming work.