

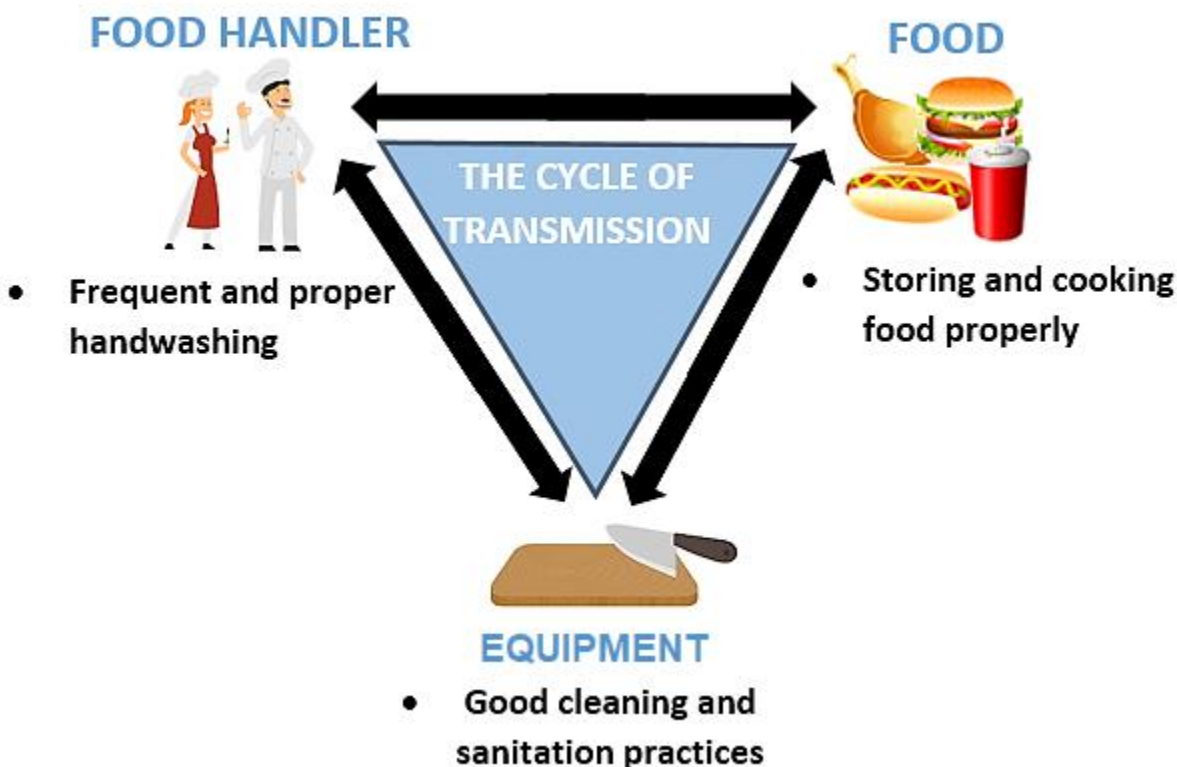
CROSS-CONTAMINATION PREVENTION

Food handlers can pass on pathogens in a number of ways. Food handlers can be:

- **Infected** which means they are sick with likely diarrhea and/or vomiting
- **Colonized** meaning a pathogen is growing on them but not making them sick
- **Carriers** meaning they show no noticeable symptoms of illness but carry disease with them for a long time and can pass on disease to others
- Food handlers can also **cross-contaminate** pathogens

THE CYCLE OF TRANSMISSION

Food-borne illness can be spread through the cycle of transmission. There are three components in the cycle of transmission and contamination at any point can quickly spread throughout the cycle. The three components are:



- **Food handler** – includes anyone that may have handled the food item
- **Equipment** – includes your kitchen, the grocery store, and anywhere else where food is stored
- **Food** – food comes in contact with an item that is contaminated.

At each step of the cycle of transmission, there's an action you can take to control and minimize the chance of food borne illness. Here are some actions you can perform:

Food Handler

- Hand washing is the number one thing you can do to improve food safety
- Wash hands, utensils, and surfaces with hot soapy water before, during, and after preparing food
- Wash hands after using the washroom



Equipment

- Clean your countertops, cutting boards and utensils with a mild bleach and water solution
- Keep separate cutting boards for raw meats and vegetables, or clean your cutting board before re-using

Food

- Keep raw meats, poultry, and fish away from other foods during storage and preparation
- Thoroughly wash all produce before you eat or cook it
- Always keep foods covered unless they are being prepared or served
- Cook food thoroughly
- Pay close attention to cooking times and temperatures for different meats because they vary
- Prepare food quickly and serve it immediately. Do not keep potentially hazardous foods at room temperature for more than two hours
- Refrigerate or freeze perishables, prepared food, and leftovers within 2 hours.
- Use a thermometer to check to make sure your refrigerator is set at a temperature of 4°C (40°F) or colder
- Keep your freezer at -18°C (0°F) or colder

Remember...



CROSS-CONTAMINATION

Cross-contamination is the transferring of microorganisms or pathogens from raw food to cooked or ready-to-eat food, making the cooked or ready-to-eat food unsafe.

Cross-contamination can either be direct or indirect:

Direct cross-contamination happens when contaminated food touches or drips onto another cooked or ready-to-eat food. Examples of direct cross-contamination include the dripping of juices from raw meats incorrectly stored on top, accidental addition of chemical cleaners, or pest feces in contact with food.

Indirect cross-contamination happens through using the same equipment or utensils to handle raw food and then cooked food. Examples of items that contribute to indirect cross-contamination include knives, spatulas, cutting boards, and food handler hands. Indirect cross-contamination is more common and considerable attention must be paid in order to prevent it from happening.

Cross-contamination typically happens in 3 ways:



**Food-to-Food
(Direct)**

Raw food or its juices come into contact with ready-to-eat food



**Equipment-to-Food
(Indirect)**

Same equipment used with raw and ready-to-eat food without washing in between



**People-to-Food
(Indirect)**

Hands touch raw food then ready-to-eat food without washing in between

How to Prevent:

- Food Separation. In the fridge, always place raw meats on bottom, fruits and vegetables in the middle, and ready-to-eat food and cooked foods above
- Use separate utensils to handle raw food and ready-to-eat/cooked food. If you only have one utensil, clean and sanitize it right after touching raw food and before touching ready-to-eat/cooked food
- When food is on display for self-serving, the handles of utensils used to serve food should never come into contact with the food
- Sneeze guards should always be used
- Frequent hand washing. Wash hands frequently and properly with soap and water right after handling raw foods. It's one of the simplest and easiest ways to prevent food-borne illness