# Cross Contamination Meeting Kit




Bacterial cross contamination is the transfer of bacteria from one substance to another.

## DANGERS OF CROSS CONTAMINATION

Cross contamination in food is a major way for bacteria to spread and multiply. It occurs when the juices or germs from other foods touch cooked foods. Cross contamination can result in food poisoning.

## HOW CROSS CONTAMINATION OCCURS

Many people assume that foodborne illness is mostly caused by eating at restaurants, but there are many ways in which cross contamination can occur:

- primary food production – from plants and animals on farms
- during harvest or slaughter
- secondary food production – including food processing and manufacturing
- transportation of food
- storage of food
- distribution of food – grocery stores, farmer’s markets, and more
- food preparation and serving – at home, restaurants, and other foodservice operations

## TYPES OF CROSS CONTAMINATION – THREE PRINCIPAL WAYS

- **Food-To-Food**

- Adding contaminated foods to non-contaminated foods results in food-to-food cross contamination. This allows harmful bacteria to spread and populate.
- Raw, undercooked, or improperly washed food can harbor large amounts of bacteria, such as Salmonella, Clostridium perfringens, Campylobacter, Staphylococcus aureus, E. coli, and Listeria monocytogenes – all of which can harm your health if consumed.
- Foods that pose the highest risk of bacterial contamination include leafy greens, bean sprouts, leftover rice, unpasteurized milk, soft cheeses, and deli meats, as well as raw eggs, poultry, meat, and seafood.

Ie. adding unwashed, contaminated lettuce to a fresh salad can contaminate the other ingredients.

- Leftovers kept in the fridge too long can result in bacterial overgrowth. Eat leftovers within 3–4 days and cook them to proper temperatures. If you plan to mix leftovers with other foods, the new meal should not be stored again as leftovers.

- **Equipment-to-food**

- Bacteria can survive for long periods on surfaces like countertops, utensils, cutting boards, storage containers, and food manufacturing equipment.
- When equipment is not washed properly or unknowingly contaminated with bacteria, it can transfer large volumes of harmful bacteria to food.

Ie. A common example of this occurring at home is using the same cutting board and knife to cut raw meat and vegetables, which can be harmful if the vegetables are then consumed raw.

- **People-to-food**

Humans can easily transfer bacteria from their bodies or clothes to food during many steps of food preparation.

I.e.. A person may cough into their hand and continue to prepare a meal without washing their hands in between.

I.e.. Using a cellphone that’s loaded with bacteria while cooking or wiping your hands with a dirty apron or towel.

## CONSEQUENCES OF CROSS CONTAMINATION

Cross contamination of food can result in food poisoning.

## HEALTH EFFECTS OF CROSS CONTAMINATION – MILD TO SEVERE EFFECTS

- Minor side effects include upset stomach, loss of appetite, headache, nausea, and diarrhea. Usually, these side effects present within 24 hours, making it difficult to determine the specific cause.
- In cases involving vomiting or diarrhea, it’s important to rehydrate properly – for example with a sports beverage – to restore hydration, blood sugar, and electrolyte levels.
- Severe side effects include diarrhea for more than 3 days, bloody stools, fever, dehydration, organ failure.
- Seek immediate medical attention if your side effects worsen or last longer than 1–2 days.

## PREVENT CROSS CONTAMINATION

**Food purchasing and storage**

- Avoid purchasing food close to its expiration date, unless you intend to eat it right away.
- Store raw meat in a sealed container or plastic bag on the bottom shelf of the refrigerator to prevent juices from leaking onto other foods.
- Use separate grocery bags for raw meat and eggs.
- Use refrigerated leftover food within 2–3 days and cook it to proper temperatures.

**Food preparation**

- Wash your hands with soap and water for at least 20 seconds after touching raw meat, petting an animal, using the washroom, coughing or sneezing, using your phone, or related instances.
- Wash your utensils, countertops, cutting boards, and other surfaces with soap and warm water.
- Use separate cutting boards for meat and vegetables.
- Use clean sponges and dishcloths.
- Cook foods to their proper temperatures by using a food thermometer.

## FINAL WORD

Anyone is at risk of becoming sick from cross contamination. However, certain groups, including pregnant women, children, older adults, and those with weakened immune systems, are at the highest risk.