



**YOUR GUARDS TO SAFE FOOD**

**EFST Advisory Guide**

# **ESSENTIAL FOOD SAFETY: A GUIDE FOR FOOD HANDLERS**

**ESSENTIAL FOOD SAFETY TRAINING Program**



**Cross  
contamination**



**Cooking**



**Cleaning**



**Chilling**



جهاز أبوظبي للرقابة الغذائية  
ABU DHABI FOOD CONTROL AUTHORITY

## EFST Advisory Guide

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Essential Food Safety Training:  
Pre-Training Awareness Guide



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# The Abu Dhabi Food Control Authority Essential Food Safety Training Program

Essential Food Safety Training (EFST) is a program developed by the Abu Dhabi Food Control Authority.

It requires all food handlers operating within the Emirate of Abu Dhabi to gain a knowledge and understanding that will help to ensure food is handled safely throughout food chain.

The EFST course includes the four essential pillars for safe food handling: how to avoid cross contamination, and how to cook, clean and chill safely.



This book has been designed to provide a basic introduction to the program, which will be developed further in the training course. If you have specific questions about the safety of your products and processes, contact your local food inspector or ADFCA-EFST team.

This book has been designed to provide a basic introduction to the most important food safety messages that will be covered within the EFST program.

## The Importance of Food Safety

Food borne disease is a serious problem that affects every country in the world. It can cause vomiting, diarrhoea and fever, and in some cases it can be deadly.



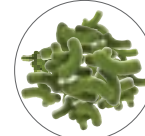
Food borne disease can affect anyone, but some people are more at risk. For example, young children, the elderly, pregnant women and people who are unwell.



It is essential for all food handlers to take care to make food safely, to protect the public from food borne disease.

## Food Safety Hazards

There are three main types of food safety hazards:



1. Microbiological (e.g. bacteria)



2. Chemical (e.g. cleaning chemicals, pesticides, etc.)



3. Physical (e.g. broken glass, hair, etc.)

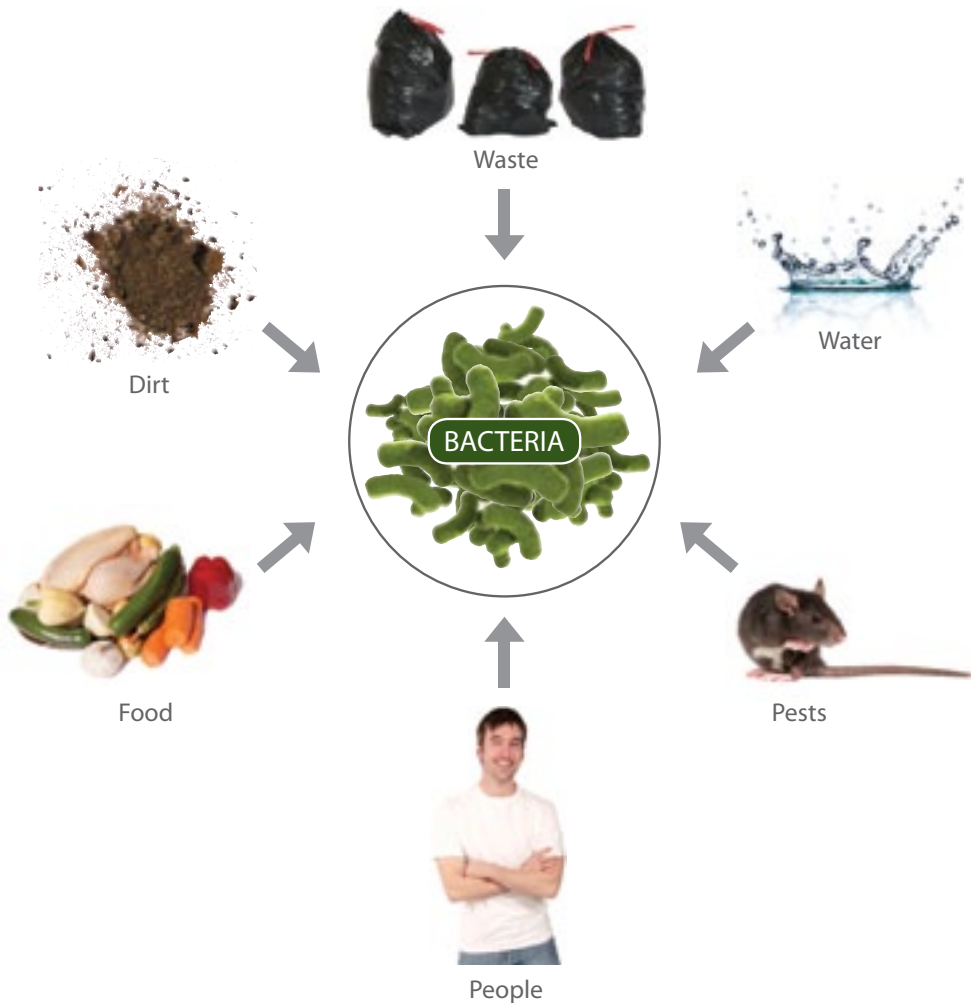
In most food businesses (e.g. catering and food service) microbiological hazards are the most important, so these will be the focus of this book.



Bacteria are very small organisms that cannot be seen without a microscope. Some types of bacteria are harmful to people and can cause food borne disease.



## Sources of Bacteria

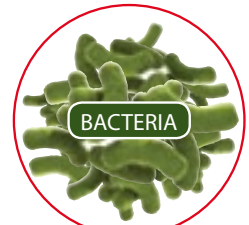


Bacteria can get into a food handling area in several ways. These include people, food, pests, dirt and dust, waste and water.

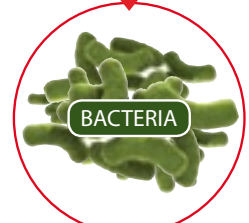
## Hand Washing



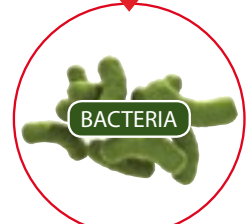
Wash in warm water.



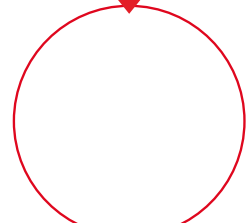
Rub with soap for 20 seconds.



Rinse thoroughly.



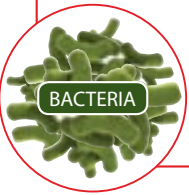
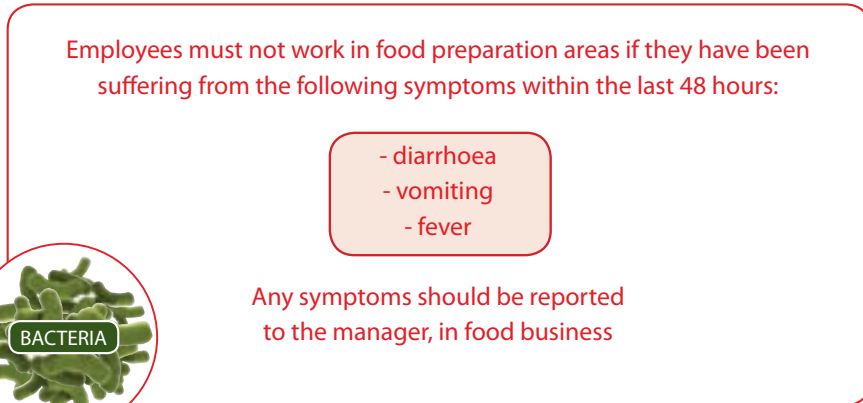
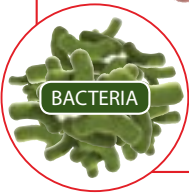
Dry with a clean disposable towel.



Hands can easily spread bacteria. They must be thoroughly washed and dried inbetween tasks, especially before touching ready-to-eat food and after touching raw food.



## Personal Hygiene



Bacteria can become trapped in jewellery and watches, and spread from hands to food. If employees are suffering from illness or have uncovered cuts they can also spread contamination.



## Protective Clothing



The human body contains many bacteria. Clean protective clothing protects food handling areas from bacteria on the skin and hair, and clothes worn outside.



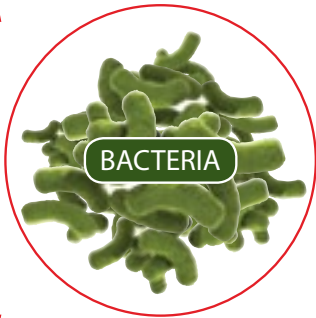


## Pest Control



Signs of pests:  
droppings,  
holes in walls,  
gnaw marks.

Signs of pests:  
insect egg cases,  
insect skins,  
webs.



Pests carry and spread bacteria. They must be prevented from getting into any food storage or handling area, for example by checking deliveries and removing waste regularly.



## Cross Contamination

Bacteria can easily spread from raw food (e.g. raw meat) onto hands, knives, chopping boards and other equipment (e.g. fridges).



Hands, utensils and equipment must be thoroughly cleaned inbetween tasks.



Raw meat must be kept separate from 'ready to eat' food (e.g. salad) at all times during storage and preparation.



'Ready-to-eat'

Raw meat

If possible, store raw meat in a separate fridge from ready-to-eat foods. If a 'general purpose fridge' is used, always store raw meat at the bottom and 'ready-to-eat' food at the top.

Raw meat can spread bacteria to ready-to-eat food (e.g. salad) unless it is kept separate at all times. Bacteria can be spread by contact with hands, utensils or equipment.





## Using Cloths



Single-use cloths (e.g. disposable paper towels) are safest for wiping surfaces and utensils.



They must be thrown away after each task.



Re-usable cloths (e.g. dish towels) can easily pick up bacteria and spread them. Single-use cloths (e.g. paper towels) are safer as they are thrown away after each task.



## Cleaning and Disinfection

Wash



Disinfect



Dry



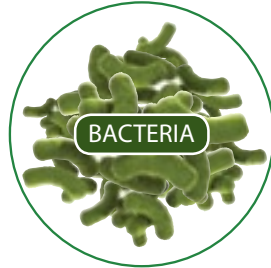
Cleaning removes dirt and grease from equipment and surfaces, and reduces bacteria. If cleaning includes a 'disinfection' step it can kill all bacteria.



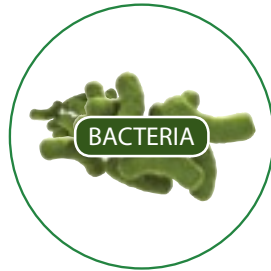
## Cleaning and Disinfection



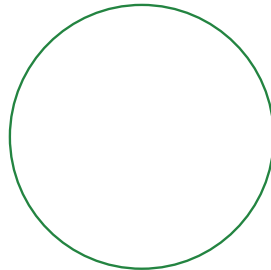
Wash with warm water and detergent.



Use a disinfectant, following the instructions.



Dry with a clean paper towel (or air dry).



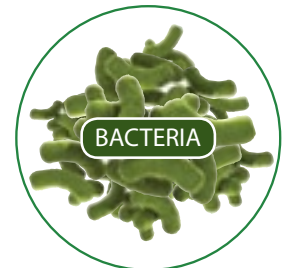
A cleaning product called a 'disinfectant' can kill bacteria if it is used correctly. The cleaning process must include washing (to remove grease), disinfection (to kill bacteria) and drying.



## Other Disinfection Methods



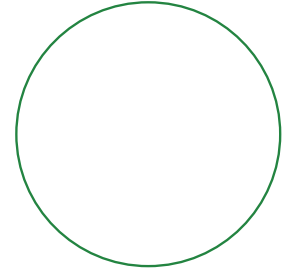
Wash



Disinfect



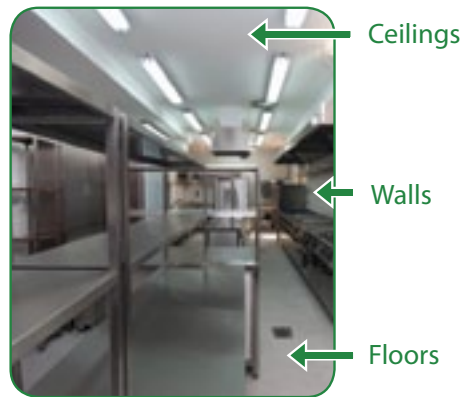
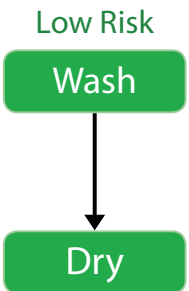
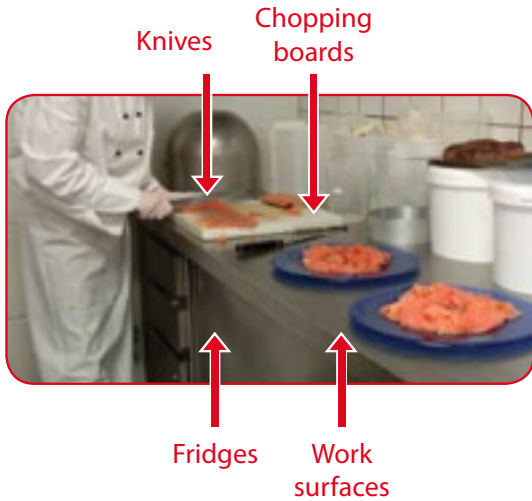
Dry



Heat kills bacteria, so if a cleaning method uses very hot water (e.g. a dishwashing machine) the bacteria will all be killed. This is another method of 'disinfection'.

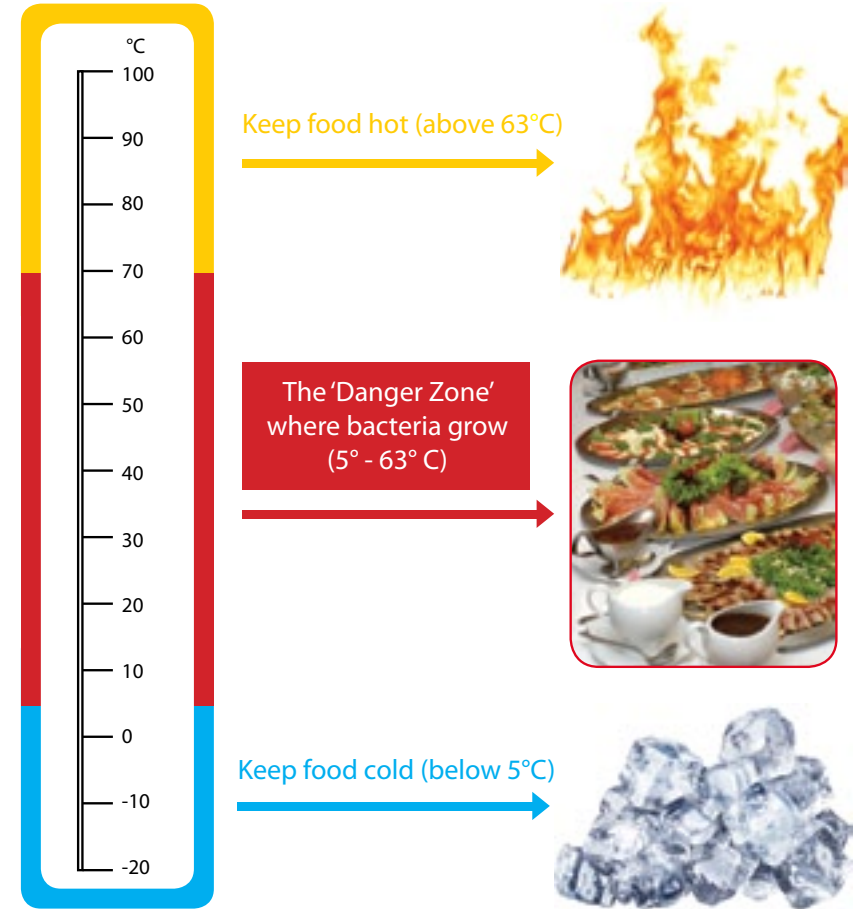


## Low and High Risk Cleaning



Some items and areas are 'high risk' because they come into direct contact with food or hands. They need to be disinfected to kill bacteria, whereas 'low risk' items and areas do not.

## The 'Danger Zone'

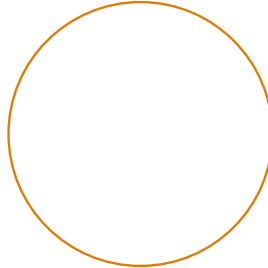
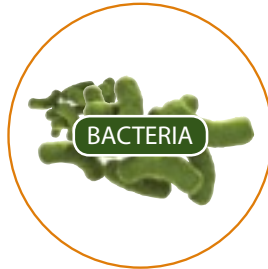
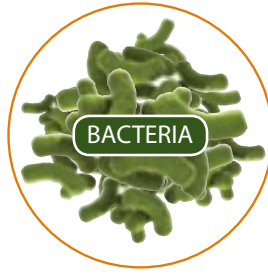


Bacteria grow quickly in warm temperatures. (i.e. danger zone).

When they get very cold they stop growing, and when they get very hot they are killed, so keep food either hot or cold.



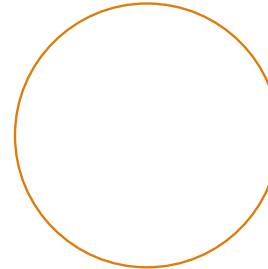
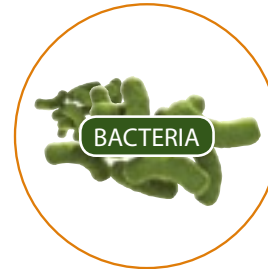
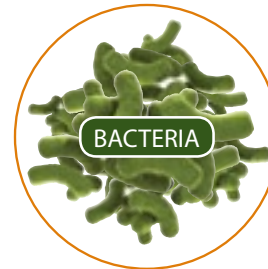
## Cooking Liquid-based Dishes



Heat kills bacteria. If food reaches a high enough temperature during cooking the bacteria will be killed. If a liquid item is boiling throughout then it has reached a safe cooking temperature.



## Cooking Poultry

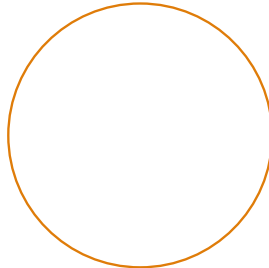


When cooking meat, there are colour changes to show that safe temperatures have been reached. White meat (e.g. chicken) must have changed from pink to white all the way through.





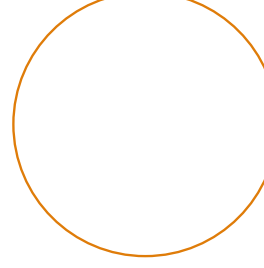
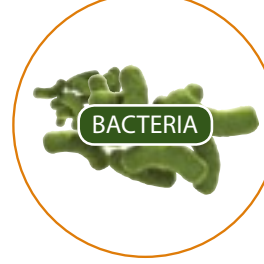
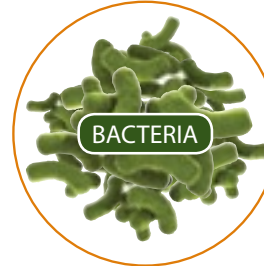
## Cooking Red Meat



Red meat that has been chopped or minced (e.g. kebab meat, burgers) must have changed from red to brown all the way through.



## Cooking Mixed Food Items



When cooking mixed food items (e.g. biryani), it must be steaming hot throughout to show that a safe temperature has been reached.



## Hot-holding and Re-heating

### Hot-holding

When hot-holding, food must be kept hot to stop bacteria from growing. Food that is stored or displayed hot must be kept at 63°C or above for a maximum of 2 hours.

If there is no temperature measurement, the food must be visually hot (e.g. steaming) to show that it is still safe.



### Re-heating

When re-heating, food must get hot enough to kill bacteria.

It must be bubbling / steaming throughout to show that a safe temperature has been reached.



### Temperature Probes

The use of temperature probes varies depending on the size and nature of a business. In some businesses (e.g. manufacturing) temperatures are measured continuously to check the safety of all food produced.

In other businesses (e.g. catering and food service) visual checks can be used each time food is cooked or re-heated. Temperature probes can be used to 'prove' that cooking, re-heating hot food are safe.



When hot-holding, food must be kept hot to stop bacteria from growing. When re-heating, food must get hot enough to kill bacteria.



## Cold and Frozen Storage

Many types of food need to be kept at cold temperatures to reduce the growth of bacteria.

Storage and display equipment should keep food below 5°C.

Food also needs to be labelled and used within its shelf life.



Food can be kept for longer periods of time if it is frozen. Freezing temperatures (i.e. -18°C) stop all bacteria growing.

Food should be kept in air-tight packaging and labelled with the date of freezing.

Most bacteria stop growing or grow very slowly in cold temperatures.

All bacteria stop growing in frozen temperatures.



## Chilling Hot Foods

The best method of chilling hot food is with specialist chilling equipment (e.g. a blast chiller).

Specialist equipment can chill food in 90 minutes. This minimises the time it spends in danger zone temperatures, where bacteria can grow.

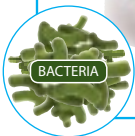


Without specialist equipment, food must be chilled as quickly as possible.

Methods include: ice, cold water and placing food in cold areas. It must not be left to cool at room temperature.



Room temperature



Cold temperature (below 5°C)





## Contact Details

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