# MyHACCP Hazard Factsheet

## CATEGORY: Microbiological

## NAME: *Salmonella* species

### General Information

The term “Salmonella” is used to describe thousands of different bacteria some of which can cause illness in humans. There are two species of Salmonellae: *Salmonella enterica* and *Salmonella bongori.* and these are divided into five sub-species. These sub species are then divided into over two thousand “serovars”. The most common types of salmonella that cause illness in humans are S. enteriditis and S.typhi.

### Common sources

You must consider *Salmonella* species to be a hazard associated with the following foods:

* Birds, in particular poultry such as chicken and turkey
* Raw meats
* Raw eggs
* Raw milk
* Raw shellfish
* Raw herbs and spices

### Properties and common controls

*Salmonella* are aerobic bacteria (require oxygen for growth) and are easily killed by heat treatment. The following time/temperature combinations will be adequate controls in most cases:

75°C instant (measured at the centre or coolest part of the food).

72°C for 15 seconds

70°C for 2 minutes

63°C for 30 minutes

*Salmonella* will grow readily at pH of between 6.6 and 8.2 but growth will be inhibited at pH 4.0.

Growth will not occur at refrigerated temperatures of 5°C but will be rapid at room temperature. Effective temperature management is therefore an important control.

The bacteria are readily spread by cross contamination from raw to ready to eat food and so effectively implemented pre-requisite programmes are essential in the control of this hazard.

### References

[*Salmonella* epidemiology](https://www.gov.uk/government/collections/salmonella-guidance-data-and-analysis)