# MyHACCP Hazard Factsheet

## **CATEGORY:** Microbiological

## **NAME:** Clostridium perfringens

### General Information

Clostridium perfringens is a toxin producing spore former. The bacteria is readily killed by normal cooking processes but will form spores which are heat resistant. If these spores are given time to germinate after cooking, they may produce a toxin in the food.

### Common sources

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

* Cooked meats
* Meat pies and pasties
* Stews and casseroles

### Properties and common controls

The optimum growth temperature for Clostridium perfringens is 37 - 45°C but there is no growth at refrigerated temperatures (≤ 8°C) or at pH <5.0. Growth of the organism will be inhibited by water activity (aw) ≤ 0.95.

Spores produced by the bacteria will survive normal cooking temperatures and as such the main control is the rapid post cooking cooling of relevant food to prevent germination of spores and toxin formation.

### References

[Epidemiology of Clostridium botulinum](https://www.gov.uk/guidance/clostridium-perfringens)