# Chapter 14 Cutting of Meat

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#### 14. Introduction

Meat for cutting may be contaminated with food poisoning bacteria, such as Salmonella, E.coli O157, or by SRM, grease, dirt, metal or other foreign bodies in the slaughterhouse or during storage and transport to the cutting plant. Bacteria can multiply quickly if meat is kept at too high a temperature. Depending on the organism, the number of bacteria needed to cause illness in a healthy adult may vary from 1,000,000 to as low as 10 (E.coli O157).

Poor hygiene will increase the potential for contamination of food, including transfer from meat to other foods including ready-to-eat products, and increase the possibility of food poisoning. Procedures are needed to minimise the risk of these hazards causing illness in consumers.

Examples demonstrating the importance of hygiene procedures during cutting of meat:

Problem	Effect	Possible outcome
Insufficient training of staff responsible for cutting, subsequent storage and transport of meat	Poor working practices	Increased risk of contamination
Inadequate procedures for the disinfection of equipment	Poorly cleaned equipment	Risk of cross contamination between carcases or batches of meat
Inadequate separation of areas and surfaces	'Clean' and 'dirty' areas, exposed meat, and poorly cleaned / difficult to clean surfaces are not adequately separated	Risk of cross contamination between carcases or batches of meat
Unhygienic storage or transport conditions	Exposure of meat to physical contamination from environmental contaminants such as dust and dirt, and from the ingress of pests	Contamination of meat with food poisoning bacteria such as Salmonella
Failure to maintain the cold chain	The higher the storage temperature, the faster bacteria will multiple and grow on meat	Contamination of meat with food poisoning bacteria such as Salmonella leading to a serious food safety hazard

## 14.1. Approval of meat cutting establishments

An establishment that places the meat it has cut up on the market as fresh meat requires approval as a 'cutting plant' and is therefore subject to veterinary control (there are certain exemptions for retail establishments selling directly to the final consumer). Regulation (EC) 853/2004 sets hygiene requirements for all approved establishments where meat is cut.

## **Meat products**

All meat used to produce meat products must meet the requirements for fresh meat (Regulation (EC) 853/2004 Annex III Section VI Meat Products: Section VI point 2). This means the meat is to be sourced from approved establishments and the requirements for hygiene during cutting and boning of red / white meat are to be met.

# Farmed game

- Mammals the provisions of Regulation (EC) 853/2004 Annex III Section I (meat of domestic
  ungulates) apply to the production and placing on the market of meat from even-toed farmed
  game mammals (deer and boar) unless the competent authority considers them inappropriate.
- Ratites (flightless birds) the provisions of Regulation (EC) 853/2004 Annex III Section II (meat from poultry and lagomorphs) apply to the production and placing on the market of meat from ratites. However, those of Section I (meat of domestic ungulates) apply where the competent authority considers them appropriate. Appropriate facilities must be provided and adapted to the size of the animals under Regulation (EC) 853/2004 Annex III Section III: Farmed game: points 1 and 2.

# Wild game

- Large wild game the rules laid down in Regulation (EC) 853/2004 Annex III Section I
  Chapter V (cutting and boning of meat of domestic ungulates) apply. See also Regulation (EC)
  853/2004 Annex III Section IV Large wild game Chapter II point 9.
- Small wild game the rules laid down in Regulation (EC) 853/2004 Annex III Section II
  Chapter V (cutting and boning of meat from poultry and lagomorphs) apply. See also
  Regulation (EC) 853/2004 Annex III Section IV Small wild game Chapter III point 7.

## 14.2. Legal requirements for the cutting of meat

The following sections set out the requirements of the regulations that apply to the cutting of meat.

# A. Structural and prerequisite hygiene requirements



# Legal requirement

## 852/2004 Annex II Food Premises: Chapter I point 2

- **A1.** The layout, design, construction, siting and size of food premises are to:
  - a) ... provide adequate working space to allow for the hygienic performance of all operations
  - b) be such as to protect against the accumulation of dirt, contact with toxic materials, the shedding of particles into food and the formation of condensation or undesirable mould on surfaces
  - c) permit good food hygiene practices, including protection against contamination ...

853/2004 Annex III Section I Red meat cutting: Chapter III points 1 & 2, Section II White meat cutting: Chapter III points 1a & 1b and Chapter V point 4; Section V Production Establishments: Chapter I points 1 & 2

- **A2.** FBOs must ensure that cutting plants / production establishments ... are constructed so as to avoid contamination of meat, in particular by:
- a) allowing constant progress of the operations, or
- b) ensuring separation between the different production batches
- **A3.** ... cutting plants ... have rooms for the separate storage of packaged and exposed meat (and products), unless stored at different times or in such a way that the packaging material and the manner of storage cannot be a source of contamination for the meat (or products).

## A1. to A3. Compliance regarding design and layout for cutting

- Make sure that premises and particularly rooms where food is prepared, treated or processed, have adequate space to allow for hygienic performance of all operations and permit good hygiene practices including protection against contamination between and during operations.
- Have sufficient room to allow the progressive flow of work or batch separation in the cutting room.
- Provide for separate storage of packaged and exposed meat and products, unless stored at different times so storage cannot be a source of contamination.

#### A1. to A3. Good practice

Consider the need for adequate working space to minimise the risk of contamination. Take into account the throughput and the separation of 'clean' and 'dirty' processes and areas.

Have sufficient room to allow for the storage of meat before and after cutting. This is so that the progressive flow of work can be properly organised and / or to ensure separation between the different production batches – see 'B5.'.

Store exposed meat and processed products separately from packaging and from packaged meat. This can be in separate rooms, or by other means – see separate chapter on 'Wrapping, packaging and transport'.

Protect meat from chemicals, condensation, dirt and other contaminants, and consider also the need for suitable, cleanable fittings, equipment and surfaces that can easily be maintained.

For more information on structural requirements see chapter 2 on 'Design and facilities' at 'A.', 'B.' and 'C.'.



# Legal requirement

852/2004 Annex II Premises: Chapter I point 7

**A4.** Food premises have adequate natural and / or artificial lighting.

## A4. Compliance regarding lighting

Install adequate lighting.

## A4. Good practice

Provide adequate lighting to assist the hygienic cutting of meat, pre-cutting inspection checks and processing operations as well as effective cleaning. As a guide these minimum levels are considered adequate:

- 540 lux at inspection points
- 220 lux in workrooms
- 110 lux in other areas



853/2004 Annex III Section I Red meat cutting: Chapter III point 3; Section II White meat cutting: Chapter III point 1c; Section V Production Establishments: Chapter I point 3

**A5.** ... cutting plants / production establishments ... have cutting rooms equipped to ensure compliance with the requirements laid down in Chapter V (of Section I (red meat)), in Chapter V (of Section II (white meat)), in Chapter III (of Section V (processing)).

# 853/2004 Annex III Section I Red meat cutting: Chapter V point 2c, Section II White meat cutting: Chapter V point 1c

**A6.** Where the premises are approved for the cutting of meat of different animal species, precautions are taken to avoid cross-contamination, where necessary by separation of the operations on the different species in either space or time.

## 852/2004 Annex II Food Premises: Chapter I points 2(d)

**A7.** Where necessary, provide suitable temperature-controlled handling and storage conditions of sufficient capacity for maintaining foodstuffs at appropriate temperatures and designed to allow those temperatures to be monitored and, where necessary, recorded.

#### A5. to A7. Compliance regarding equipping cutting plants

- Make sure that cutting rooms can meet the requirements for:
  - progressive working / batch separation
  - · separation of meat of different species
  - temperature control

#### A5. to A7. Good practice

Premises where meat is cut need to be equipped to meet the operational requirements for the hygienic cutting and boning of meat.

Progressive flow of work / batch separation – see 'A1. to A3.', 'B2. to B4.' and 'B5.'.

Meat of different species – see 'B6.'.

Temperature control – see 'C.'.



853/2004 Annex III Section I Red meat cutting: Chapter III points 4 & 5; Section II White meat cutting: Chapter III points 1d & 1e; Section V Production Establishments: Chapter I point 5

**A8.** ... cutting plants/production establishments ... have facilities for disinfecting tools with hot water supplied at not less than 82 °C, or an alternative system having an equivalent effect.

#### 852/2004 Annex II Rooms: Chapter II point 2

**A9.** Adequate facilities are to be provided, where necessary, for the cleaning, disinfecting and storage of working utensils and equipment.

### A8. and A9. Compliance regarding facilities for disinfecting tools

Provide facilities for cleaning, disinfecting and storage of tools.

#### A8. and A9. Good practice

**Disinfection of tools** – see 'B7. and B8.' and chapter 2 on 'Design and facilities' at 'D8.'.



#### Legal requirement

853/2004 Annex III Section I Red meat cutting: Chapter III points 4 & 5; Section II White meat cutting: Chapter III points 1d & 1e; Section V Production Establishments: Chapter I point 4

**A10.** ... cutting plants/production establishments ... have equipment for washing hands with taps designed to prevent the spread of contamination, for use by staff engaged in handling exposed meat.

## A10. Compliance regarding facilities for hand washing

 Provide hand washing equipment with taps designed to prevent the spread of contamination for staff that handle exposed meat.

#### A10. Good practice

**Hand washing facilities** – see chapter 2 on 'Design and facilities' and 'D9.'.



## 853/2004 Annex III Section II White meat cutting: Chapter III point 2

- **A11.** If the following operations are undertaken in a cutting plant:
  - (a) the evisceration of geese and ducks reared for the production of 'foie gras', which have been stunned, bled and plucked on the fattening farm, or
  - (b) the evisceration of delayed eviscerated poultry

FBOs must ensure that separate rooms are available for that purpose.

## A11. Compliance regarding evisceration of poultry

 Provide separate rooms if the cutting plant is eviscerating geese and ducks reared for 'foie gras' production, or of delayed eviscerated poultry.

### A11. Good practice

White meat cutting plants may eviscerate poultry slaughtered on authorised farms for delayed evisceration or for the production of 'foie gras' if there is a separate room for that operation and there are arrangements for official inspection as under 854/2004 Annex I Section IV Chapter V B2.

See chapter 11 on 'Acceptance and slaughter of animals'.

#### B. Operational requirements



# Legal requirement

### 852/2004 Annex II Foodstuffs: Chapter IX point 1

**B1.** A food business operator is not to accept raw materials or ingredients, other than live animals, or any other material used in processing products, if they are known to be, or might reasonably be expected to be, contaminated with parasites, pathogenic micro-organisms or toxic, decomposed or foreign substances to such an extent that, even after the FBO had hygienically applied normal sorting and / or preparatory or processing procedures, the final product would be unfit for human consumption.

## B1. Compliance regarding acceptance and sorting of meat

- Arrange for the sorting of incoming meat if necessary.
- Do not accept raw materials if they are known, or reasonably expected, to be contaminated
  with parasites, pathogenic micro-organisms or toxic, decomposed or foreign substances to
  such an extent that, even after the hygienic application of normal sorting and / or processing,
  the final product would be unfit for human consumption.

# **B1. Good practice**

Make adequate arrangements to accept deliveries of meat – see 'B2. to B4'.

**Inspection** – check raw meat on arrival to make sure that it:

- is sourced from approved slaughterhouses, cutting establishments or cold stores and correctly identified, for example, health / ID marked meat see chapter 16 on 'Food traceability'
- meets temperature requirements
- is not contaminated by, for example, foreign bodies parasites, pests, damaged packaging
- meets company quality specifications and documentation requirements

Take action if the food safety and other specifications are not met. Depending on the problem, action may include:

- holding, for example, to await documentation
- treatment, for example, trimming otherwise fit meat of visible contamination
- divert to production of heat treated product
- disposal
- a return to the originating premises, but where the meat received is not fit for human consumption then it must be handled as an animal by-product. It cannot be returned to the supplier unless they are authorised to receive animal by-product

**Sampling** – if incoming raw materials are sampled for laboratory testing, and a positive release system is in place, these raw materials will need to be held until the results become available. In

all cases, robust arrangements are needed so that test results can be matched to sampled products.



# Legal requirement

#### 852/2004 Annex II Foodstuffs: Chapter IX points 2, 5, 8

- **B2.** Raw materials and all ingredients stored in a food business are to be kept in appropriate conditions designed to prevent harmful deterioration and protect them from contamination.
- **B3.** Raw materials, ingredients, intermediate products and finished products likely to support the reproduction of pathogenic micro-organisms or the formation of toxins are not to be kept at temperatures that might result in a risk to health.

Food businesses manufacturing, handling and wrapping processed foodstuffs are to have suitable rooms, large enough for the separate storage of raw materials from processed material and sufficient separate refrigerated storage.

**B4.** Hazardous and / or inedible substances, including animal feed, are to be adequately labelled and stored in separate and secure containers.

## B2. to B4. Compliance regarding hygienic handling and storage of accepted meat

## Arrange for:

- suitable rooms, large enough for the separate storage of raw materials from processed material
- sufficient separate refrigerated storage
- separate storage of exposed meat from packaged meat and packaging
- adequate storage for inedible and hazardous materials in labelled, separate and secure containers

## B2. to B4. Good practice

Make adequate arrangements to accept deliveries of meat for cutting, so that the meat is either cut shortly after arrival or placed in refrigerated storage. The conditions must prevent harmful deterioration and protection from contamination.

**Batch identification** – preserve the identity of incoming batches for stock control and traceability purposes.

**Refrigeration** – the hygiene regulations set maximum temperature requirements for meat – see 'C.'. Temperature control is important to minimise the growth of microbiological organisms that may spoil food or cause food poisoning.

**Storage** – have enough space to store raw meat separately from processed and or packaged products. This may be done by keeping them in separate stores, or in the same store at a different

time, or at the same time with either a permanent barrier between them that can be cleaned and disinfected or by using an appropriately placed polythene covering to prevent air-borne cross-contamination – see 'A1. to A3.'.



Storage facilities and practices – packaged and exposed meat can be stored in the same chiller providing that arrangements are in place to prevent hygiene being compromised. Vacuum-packed meat and meat in clean trays can be stored with exposed meat as long as it is not contaminated by carcase drip (there is spatial separation between exposed and vacuum-packs).

Ensure there is enough space to store raw meat separately from processed and / or packaged products. This can be done by keeping them in the same store at different time or at the same time with either a permanent barrier between them.

**Hazardous or inedible materials** – keep meat for human consumption apart from such material. Storage containers need to be clearly labelled and secured in a way that avoids the risk of contaminating foodstuffs.

The hygiene prerequisites for all cutting establishments can be found in chapters 3 on 'Water supply', 4 on 'Maintenance', 5 on 'Cleaning' and 6 on 'Pest control'.



#### Legal requirement

853/2004 Annex III Section I Hygiene during Cutting and Boning: Chapter V point 2(a) and Section II Chapter V point 1(a), Section V Chapter III point 1

**B5.** The work on meat must be organised in such a way as to prevent or minimise contamination...

(a) meat intended for cutting is brought into the workrooms progressively as needed.

# **B5.** Compliance regarding cutting operations

Bring meat into the workroom progressively as needed.

#### **B5.** Good practice

Minimise the opportunity for contamination and keep interruptions to the cold chain to a minimum by keeping meat packed and in chilled storage until it is to be worked on in the cutting room.

Once it is cut, transfer meat promptly to refrigerated storage. Particular care is needed where the rate of accumulation can compromise temperature control, for example, where trim is gathered from the processing of larger cuts but it may take several hours for containers to be filled and moved to chilled storage.

Consider what standard operating procedures should be in place for meat that is "work in progress" and at break times.

**Temperature requirements** – see 'C.'.



## Legal requirement

853/2004 Annex III Section I Hygiene During Cutting and Boning: Chapter V point 2(c) and Section II Hygiene During & After Cutting and Boning: Chapter V point 1(c)

**B6.** ... where the premises are approved for the cutting of meat of different animal species, precautions are taken to avoid cross-contamination, where necessary by separation of the operations on the different species in either space or time.

## **B6.** Compliance regarding meat of different species

 Where cutting meat of different animal species, take precautions to avoid cross-contamination, where necessary by separation of the operations on the different species in either space or time.

#### **B6.** Good practice

Equip the premises so that, if meat from different animal species is cut, contamination of meat of different species is avoided by adequate separation of cutting operations in time or space. Cut meat of different species at different times with adequate cleaning and disinfection between operations if separate facilities are not available. This may require adequate space for storage of meat before and after cutting.



<u>Processing multiple species</u> – cut meat of different species at different times with adequate cleaning and disinfection between operations if separate facilities are not available.



## 852/2004 Annex II Equipment: Chapter V point 1(a)

- **B7.** All articles, fittings and equipment with which food comes into contact are to:
- (a) be effectively cleaned, and where necessary, disinfected. Cleaning and disinfection are to take place at a frequency sufficient to avoid any risk of contamination.
- (b) be so constructed,...and be kept in such good order repair and condition...

853/2004 Annex III Section I Red meat cutting: Chapter III point 5, Section II White meat cutting: Chapter III point 1e; Section V Production Establishments: Chapter I point 5

**B8.** (Cutting plants/production establishments) must have facilities for disinfecting tools in hot water supplied at a temperature of not less than 82°C or by an alternative method having an equivalent effect.

## B7. and B8. Compliance regarding disinfection of tools

 Disinfect tools in hot water supplied at a temperature of not less than 82°C or by an alternative method having the equivalent effect.

#### B7. and B8. Good practice

Start each work period with clean and disinfected tools. Rinse tools to remove visible dirt before they are disinfected, for example, in a knife 'steriliser'. Knives and other tools should be rinsed and disinfected often.

**Scabbards** – can be a source of contamination of disinfected knives, but may be used for health and safety reasons (for example, to carry knives across workrooms). In a cutting room for example, clean, disinfected scabbards may provide temporary storage for a set of clean, disinfected knives. If scabbards are used, use different scabbards for clean and dirty knives and only put clean knives in a clean scabbard.

**Steels** – disinfect steels after cleaning and do not use in a way that contaminates clean, disinfected knives.

TIP

Steels - Leaving a steel in a knife steriliser may damage it.



## 852/2004 Annex II Personal Hygiene: Chapter VIII point 1

**B9.** Every person working in a food-handling area is to maintain a high degree of personal cleanliness and is to wear suitable, clean and, where necessary, protective clothing.

## B9. Compliance regarding personal hygiene

 Make sure that every person working in a food-handling area maintains a high degree of personal cleanliness.

### **B9. Good practice**

All staff, as well as maintenance staff, managers, officials and visitors, need to comply with the company's personal hygiene procedures, particularly hand washing and wearing of protective clothing.

See chapter 8 on 'Personal hygiene'.



## Legal requirement

## 852/2004 Article 5 point 1

**B10.** Food business operators shall put in place, implement and maintain a permanent procedure or procedures based on the HACCP principles.

## 852/2004 Annex II Foodstuffs: Chapter IX point 3

**B11.** At all stages of production, processing and distribution, food is to be protected against any contamination likely to render food unfit for human consumption, injurious to health or contaminated in such a way that it would be unreasonable to be consumed in that state.

## B10. and B11. Compliance regarding HACCP-based procedures

- Implement and maintain a permanent procedure or procedures based on the HACCP principles.
- Protect food at all stages of production, processing and distribution, against any contamination likely to render food unfit for human consumption, injurious to health or contaminated in such a way that it would be unreasonable to be consumed in that state.

#### B10. and B11. Good practice

HACCP-based procedures are necessary to ensure that food safety hazards, notably microbiological cross-contamination during cutting and the growth of bacteria through inadequate temperature control, are minimised. This is done by setting and applying operational limits and procedures for cutting and maintenance of the cold chain, for example, during storage and

transport.

Include in the HACCP plan: the procedures for controlling hazards, the limits that are to be monitored, the checks to be carried out, the corrective actions to be taken to ensure the safety of the meat and the records to be kept of those checks and actions.

See '14.1. Approval of meat cutting establishments' and chapter 9 on 'HACCP principles'.

**Microbiological testing** – can help confirm (validate / verify) the effectiveness of HACCP-based procedures, see process hygiene criteria in chapter on 'Microbiological criteria'.

**Dropped meat policy procedures** – depend on the size of the piece of meat and the extent and nature of any possible contamination. Trim large pieces of red meat or in-skin poultry carcases before processing is resumed. Pieces that are not suitable for trimming should be disposed of as unfit food.



<u>Dropped meat policy</u> – large pieces of red meat or in-skin poultry carcases may be trimmed of prior to processing.



#### Legal requirement

852/2004 Annex II Training: Chapter XII points 1 & 2

Food business operators are to ensure:

**B12.** That food handlers are supervised and instructed and / or trained in food hygiene matters commensurate with their work activity.

**B13.** That those responsible for the development and maintenance of the required procedures based on HACCP principles, or for the operation of relevant guides, have received adequate training in the application of the HACCP principles.

#### B12. and B13. Compliance regarding training, instruction and supervision

Make sure that:

- food handlers are instructed and / or trained in food hygiene matters commensurate with their work activity
- staff responsible for the development and maintenance of HACCP-based procedures have received adequate training in the application of HACCP principles

## B12. and B13. Good practice

Instruct all food handlers (including temporary staff) in hygienic cutting skills, awareness of food safety principles, especially the need to minimise contamination for temperature controls and personal hygiene, the need to follow instructions and to report failing controls promptly. Supervise

as appropriate and issue reminders if lapses occur.

Keep accurate individual training records to show what instruction / training has been given.

**HACCP training** – make sure that at least one person in the business has sufficient training in the application of HACCP principles. This is to control the food safety hazards in the business by developing and maintaining HACCP-based procedures or by following the guides. See chapter 9 on 'HACCP principles' at 'A.' and also chapter 7 on 'Training'.

#### C. Temperature requirements



## Legal requirement

### 852/2004 Annex II Foodstuffs: Chapter IX point 5

**C1.** Raw materials, ingredients, intermediate products and finished products likely to support the reproduction of pathogenic micro-organisms or the formation of toxins are not to be kept at temperatures that might result in a risk to health. The cold chain is not to be interrupted.

However, limited periods outside temperature control are permitted, to accommodate the practicalities of handling during preparation, transport, storage, display and service of food, provided that it does not result in a risk to health.

## 852/2004 Annex II Transport: Chapter IV point 7

**C2.** Where necessary, conveyors and / or containers used for transporting foodstuffs are to be capable of maintaining foodstuffs at appropriate temperatures and allow those temperatures to be monitored.

## C1. and C2. Compliance regarding maintaining the cold chain

- Do not interrupt the cold chain except for limited periods, to accommodate the practicalities of handling during preparation, transport, storage, display and service of food, provided that it does not result in a risk to health.
- Make sure that vehicles and containers are, where necessary, capable of maintaining foodstuffs at appropriate temperatures and allowing those temperatures to be monitored.

## C1. and C2. Good practice

Keep meat chilled to minimise the opportunity for the growth of spoilage and food poisoning organisms. There are specific temperature requirements for meat that must be complied with. See chapter 10 on 'Temperature controls'.

**Transport** – there are specific temperature requirements for the transport of meat, vehicles and / or containers used for transporting meat. These need to be capable of maintaining the cold chain and monitoring temperatures, unless specific exemptions apply – see 'C1. and C7.' and other references in this chapter.



# 853/2004 Annex III Section I Hygiene during Cutting and Boning: Chapter V point 4

**C3.** (Red meat) may also be boned and cut prior to reaching the temperature referred to in point 2b ('C9.'; not more than 3°C for offal and 7°C for other meat) when the cutting room is on the same site as the slaughter premises. In this case, the meat must be transferred to the cutting room either directly from the slaughter premises or after a waiting period in a chilling or refrigerating room.

As soon as it is cut and, where appropriate, packaged, the meat must be chilled to the temperature referred to in point 2b ('C9.'; not more than 3°C for offal and 7°C for other meat).

## C3. Compliance regarding warm cutting of red meat at co-located premises

Meat may be boned and cut warm in a cutting room on the same site as the slaughterhouse.

## C3. Good practice

If red meat is to be cut warm at a co-located cutting room, transfer carcases or wholesale cuts either directly from the co-located slaughterhouse or, after a waiting period, in a chilling or refrigerating room.



#### Legal requirement

#### 853/2004 Annex III Section I Storage and Transport: Chapter VII point 2

**C4.** (Red meat) must attain the temperature specified in point 1 (not more than 3°C for offal and 7°C for other meat) and remain at that temperature during storage.

#### 853/2004 Annex III Section I Storage and Transport: Chapter VII point 3

**C5.** (Red meat) must attain the temperature specified in point 1 (not more than 3°C for offal and 7°C for other meat) before transport, and remain at that temperature during transport (see 'C1. and C7.').

# 853/2004 Annex III Section I Storage and Transport: Chapter VII points 2 & 3

**C6.** Food business operators must ensure that the storage and transport of (red) meat of domestic ungulates takes place in accordance with the following requirements ('C4.' and 'C5.').

## C4. to C6. Compliance regarding chilling, storage and transport of red meat

 Chill the meat as soon as it is cut and where appropriate, packaged, to not more than 3°C for offal and 7°C for other meat. Store the meat at those temperatures. Unless transport of warm meat is allowed, make sure that meat attains 3°C for offal and 7°C for other meat before transport and remains at that temperature during transport.

#### C4. to C6. Good practice

Chill red meat as soon as possible after cutting and packaging.

**Chilling** – allow adequate space for air to circulate between carcases, avoid drips from one piece of meat to another. Meat not hung should be placed on corrosion-resistant trays. Keep the opening and closing of the chiller door to a minimum.

**Storage and transport** – once meat is chilled down to the legal temperatures throughout the meat, maintain the required temperatures during storage and transport.

**Dispatch, transport, temperature checks and records** – see chapter 10 on 'Temperature controls' at 'B1. to B3.' and 'B3.'.



## Legal requirement

853/2004 Annex III Section I Storage and Transport: Chapter VII point 3(a) & 3(b)

- **C7.** However, transport of meat that has not attained 3°C for offal and 7°C for other meat may also take place if the competent authority so authorises to enable the production of specific products, provided that:
- (a) such transport takes place in accordance with the requirements that the competent authority specifies in respect of transport from one given establishment to another, and
- (b) the meat leaves the slaughterhouse, or a cutting room on the same site as the slaughter premises, immediately and transport takes no more than two hours

## C1. and C7. Compliance regarding transport of warm red meat

- A slaughterhouse or co-located cutting room may send red meat to a named establishment before chilling for the production of specific products subject to competent authority requirements, if transport takes place immediately after slaughter and takes no more than two hours.
- The cold chain is not to be interrupted except for limited periods, to accommodate the
  practicalities of handling during preparation, transport, storage, display and service of food,
  provided that it does not result in a risk to health.

#### C1. and C7. Good practice

Red meat may be transported before reaching 7 °C throughout the meat or 3°C for offal, if authorised by the OV and meeting other requirements in 853/2004 Annex III, Section I Chapter VII (3a) and 3(b)

The authorisation may be amended, suspended or revoked by the OV if the following conditions are not complied with;

- The meat leaves the slaughterhouse, or cutting room on the same site as the slaughter premises, immediately<sup>1</sup> and transport takes no more than two hours.
- Records are maintained to show details of the warm meat being transported warm to each given establishment on any one occasion (for example, species, volumes, destinations, travel time).
- Also required is a general description of the products to be produced when the warm meat is delivered. This may be in general terms such as cuts of lamb and pork, or some other description of the intended end product.
- The Official Veterinarian is advised of any proposed variations in the use of the authorisation (for example, species and destinations).

¹'Immediately' in this context applies only to meat that has not been partially chilled. It is interpreted to mean 3 hours from the completion of post mortem inspection of the first animal slaughtered to be transported warm to the departure of the vehicle from the slaughterhouse. Meat that has been partially chilled (but has not reached the required temperature of 7°C (carcase) or 3 °C (offal), can also be transported 'warm' and there are no time constraints for how long partially chilled warm meat can be kept at the slaughterhouse prior to transport, however, the meat is still subject to a maximum period of two hours transport from the slaughterhouse and this must take place in refrigerated transport so that the chill curve is maintained.

The chilling of meat to reach legally required temperatures for red meat and offal en route to places of destination of more than two hours' duration will no longer be permitted.

The authorising OV must be satisfied with the procedures for handling meat transported warm at both the dispatching and receiving establishments. Once agreed, similar consignments between the two premises do not need to be re-authorised. The application form for warm meat authorisation is available on

 $\underline{\text{http://www.food.gov.uk/enforcement/sectorrules/meatplantsprems/process-for-transportation-of-warm-meat-authorisation.}$ 

**Halal meat** – it is not an Islamic requirement for Halal meat to leave the slaughterhouse unchilled. Meat transported in unrefrigerated vehicles is at greater risk of arriving in an unfit state, which would mean it could no longer be considered Halal even though it has been derived from a Halal slaughtered animal.

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# 853/2004 Annex III Section I Hygiene during Cutting and Boning: Chapter V point 3

**C8.** However, meat may be boned and cut before it reaches the temperature referred to in point 2b ('C9.'; not more than 3°C for offal and 7°C for other meat) in accordance with Chapter VII point 3 (see 'C1. and C7.').

## C1. and C8. Compliance regarding cutting of warm red meat

 Meat may be boned and cut before it reaches 3°C for offal and 7°C for other meat if transported warm (as described at 'C1. and C7.').

## C1. and C8. Good practice

If red meat has been transported warm it may be cut warm if cutting is carried out soon after arrival at the premises. If this is not possible make arrangements for chilling down the meat to the legal temperatures. A lengthy delay before cutting is not covered by the exemption for 'limited periods, to accommodate the practicalities of handling' set out at 'C1. and C2.'.

If red meat is cut before chilling, its temperature should begin to be lowered as soon as possible after cutting.



<u>Cutting of warm meat</u> – meat may be boned and cut above 7°C with appropriate HACCP.



#### Legal requirement

853/2004 Annex III Section I Hygiene during Cutting and Boning: Chapter V points 2(a) (b)

- **C9.** ... food business operators must ensure in particular that:
  - (a) meat intended for cutting is brought into the workrooms progressively as needed
  - (b) during cutting, boning, trimming, slicing, dicing, wrapping and packaging, the meat is maintained at not more than 3°C for offal and 7°C for other (red) meat by means of an ambient temperature of not more than 12°C or an alternative system having an equivalent effect

#### C9. Compliance regarding cutting of chilled red meat

- Bring meat into the cutting room progressively as needed.
- Maintain the meat at not more than 3°C for offal and 7°C for other meat during cutting, boning,

trimming, slicing, dicing, wrapping and packaging, by means of an ambient temperature of not more than 12°C or an alternative system having an equivalent effect.

#### C9. Good practice

Keep red meat in chilled storage until it is to be worked on in the cutting room and return it there as quickly as possible after cutting.

Maintain meat at or below the required temperatures during cutting, boning, trimming, slicing, dicing, wrapping and packaging. This may be achieved by different methods, for example, by means of an ambient temperature of not more than 12°C or use of chilled conveyors / tunnels or an alternative system having an equivalent effect.



## Legal requirement

853/2004 Annex III Section I Storage and Transport: Chapter VII point 4

**C10.** (Red meat) intended for freezing must be frozen without undue delay, taking into account where necessary a stabilisation period before freezing.

## C10. Compliance regarding freezing of red meat

If it is to be frozen, freeze meat without undue delay.

#### C10. Good practice

See chapter 10 on 'Temperature controls', 'B.' and 'B4.'.

Regulation (EC) 853/2004 Annex II, section IV, requires date of production and date of freezing details to be made available to the FBO to whom the food is supplied. See chapter 16 on 'Food traceability'.



#### Legal requirement

# 853/2004 Annex III Section II Hygiene During & After Cutting & Boning: Chapter V point 2

**C11.** (White meat) may be boned and cut prior to reaching the temperature referred to in point 1(b) ('C11. to C13.'; not more than 4°C) when the cutting room is on the same site as the slaughter premises, provided that it is transferred to the cutting room either:

- (a) directly from the slaughter premises, or
- (b) after a waiting period in a chilling or refrigerating room

## C11. Compliance regarding warm cutting of white meat at co-located premises

White meat may be boned and cut warm in a cutting room on the same site as the

slaughterhouse.

## C11. Good practice

White meat may not be transported above 4°C other than to a cutting room co-located with the slaughterhouse, in which case carcases can be transferred directly after slaughter or after a waiting period in a chilling or refrigerating room.



## Legal requirement

853/2004 Annex III Section II Hygiene During & After Cutting & Boning: Chapter V point 1(a) (b)

C12. ... food business operators must ensure in particular that:

- (a) (white) meat intended for cutting is brought into the workrooms progressively as needed
- (b) during cutting, boning, trimming, slicing, dicing, wrapping and packaging, the (white) meat is maintained at not more than 4°C, by means of an ambient temperature of not more than 12°C or an alternative system having an equivalent effect

## C12. Compliance regarding cutting of chilled white meat

- Bring meat into the cutting room progressively as needed.
- Maintain the meat at not more than 4°C during cutting, boning, trimming, slicing, dicing, wrapping and packaging by means of an ambient temperature of not more than 12°C or an alternative system having an equivalent effect.

#### C12. Good practice

Keep white meat packed and in chilled storage until it is to be worked on in the cutting room and return it there as quickly as possible after cutting.

Maintain white meat at or below the required temperatures during cutting, boning, trimming, slicing, dicing, wrapping and packaging. This may be achieved by different methods, for example, by means of an ambient temperature of not more than 12°C or use of chilled conveyors / tunnels or an alternative system having an equivalent effect.



<u>Warm cutting of meat</u> – meat may be boned and cut above 4 degrees centigrade with appropriate HACCP.

See chapter 10 on 'Temperature Controls' at 'B.'.



853/2004 Annex III Section II Hygiene During & After Cutting & Boning: Chapter V point 3

**C13.** As soon as it is cut and, where appropriate, packaged, the meat must be chilled to the temperature referred to in point 1(b) ('C12'; not more than 4°C).

#### C11. to C13. Compliance regarding chilling of white meat

 Chill the meat as soon as it is cut and where appropriate, packaged, to not more than 4°C.

#### C11. to C13. Good practice

Chill white meat as soon as possible after cutting and packaging down to at least 4°C throughout the meat and then maintain the required temperatures. Keep opening and closing of the chiller door to a minimum.



## Legal requirement

853/2004 Annex III Section V Minced Meat, Meat Preparations and Mechanically Separated Meat (MSM) Production Establishments: Chapter III points 1a & 1b

**C14.** Food business operators producing minced meat, meat preparations or MSM must ensure the work on meat must be organised in such a way as to prevent or minimise contamination. To this end, food business operators must ensure in particular that the meat used is:

- a) at a temperature of not more than 4°C for poultry, 3°C for offal and 7°C for other meat
- b) brought into the preparation room progressively as needed

# C14. Compliance regarding cutting in production establishments

• Bring meat into the preparation room progressively as needed and make sure that the meat used is at a temperature of not more than 4°C for poultry, 3°C for offal and 7°C for other meat.

#### C14. Good practice

Keep interruptions to the cold chain to a minimum by keeping meat packed and in chilled storage until it is to be worked on.



<u>Cutting and processing</u> – maintain meat at or below the required temperatures during cutting, boning, trimming, slicing, dicing, processing, wrapping and packaging. Meat can be kept at or below the required temperatures by maintaining a low ambient temperature in the cutting room or by using other methods.

See chapter 10 on 'Temperature Controls' at 'B.' and chapter 15 on 'Meat Processing'.

## 14.3. Official control requirements



# Legal requirement

# 854/2004 Article 4 points 4c & 4h

Audits by officials of good hygiene practices shall verify that meat plant operators apply pre-operational, operational and post-operational hygiene procedures, temperature controls and controls on food entering and leaving the establishment and any accompanying documentation, continuously and properly.

# 854/2004 Article 4 point 5

Audits by officials of HACCP- based procedures shall verify that meat plant operators apply such procedures continuously and properly.

## 854/2004 Article 5 point 1

The official veterinarian shall carry out inspection tasks in ... cutting plants placing fresh meat on the market in accordance with the general requirements of Section I, Chapter II, of Annex I, and with the specific requirements of Section IV, ...

# 14.4. Applying procedures continuously and properly



#### Legal requirement

#### 852/2004 Article 1 point 1a

The operator is responsible for food safety in the food business.

#### 852/2004 Article 5 point 1

Food business operators shall put in place, implement and maintain a permanent procedure or procedures based on the HACCP principles.

#### 178/2002 Article 17

Food ... business operators at all stages of production, processing, and distribution within the businesses under their control shall ensure that foods ... satisfy the requirements of food law which are relevant to their activities and shall verify that such requirements are met.

## 14.4. Compliance regarding operator responsibilities for cutting meat

- Operator responsibility includes applying and verifying the company's temperature control procedures and taking corrective action if those procedures fail.
- Implement and maintain a permanent procedure or procedures based on the HACCP principles.

#### 14.4. Good practice

Operator responsibility includes maintaining and monitoring hygienic cutting procedures and taking corrective action if there is a failure. These procedures should be based on HACCP principles – see 'B10. and B11.' and chapter 9 on 'HACCP principles'.

**Delegation** – responsibility for applying and verifying the company's cutting and temperature control procedures may be delegated to a nominated person to whom problems are reported, and who has sufficient authority to ensure that corrective action is taken when necessary.

**Verification** – check daily that staff are following the company's temperature control procedures including heat treatment if appropriate. Work of new or temporary people who are less familiar with the procedures and premises may need to be monitored more frequently.

**Records** – keep an accurate, dated account (for example, in a Food safety management diary / daybook) of each periodic check and of any corrective action taken.

**Corrective action** – take action when failures of the company's temperature control procedures are identified. Such action may include:

- dealing with any product that has been outside the cold chain
- dealing with equipment failures
- establishing the underlying cause and what needs to be done to prevent similar incidents in the future
- improving staff instructions and training