

**HACCP GUIDANCE FOR THOSE PRODUCING WILD GAME MEAT FOR HUMAN CONSUMPTION EITHER
AT AN APPROVED GAME HANDLING ESTABLISHMENT OR UNDER EXEMPTION ALLOWED BY THE
FOOD HYGIENE REGULATIONS**

HACCP guidance for those producing wild game meat for human consumption either at an approved game handling establishment or under an exemption allowed by the Food Hygiene Regulations

Introduction:

Where food is prepared, manufactured or processed, operators can develop their own food safety management procedures by following the traditional HACCP process, or by following Guides to Good Practice, including generic HACCP guides.

Documentation is an important part of the HACCP process, providing evidence of the operator's thinking and decisions that can be audited. Hygiene procedures, checks and actions need to be documented. But this does not mean recording everything; a flexible approach may be taken allowing the possibility of making a record only when there is a problem or if something unusual happens and recording the corrective action as a result. All records should identify the persons who complete them. Records must be kept for a sufficient time to allow the operator to verify the HACCP based system, and the competent authority to audit it.

Smaller businesses (such as shoots preparing oven ready birds) should use the 'Food Safety Management Diary for Wild Game Meat Producers' if they do not have alternative arrangements in place. Large and/or complicated businesses (such as those preparing oven ready birds and cooked ready meals) need more sophisticated systems. **The food risk associated with a business is dependant on the type of products handled and produced and not necessarily dependant on the size of the business in question.**

Generic HACCP Guides:

The meat production process is similar enough across the industry to justify a 'generic' approach for implementing HACCP principles. This approach helps to provide uniformity in training, implementation, and enforcement but cannot reflect the individual features of each plant and how it operates. So, if they want to follow generic guidance, operators need to adapt it to reflect their own circumstances.

- Model HACCP template documents are at pages 2-3
- A partial generic HACCP plan for wild game is at pages 4-10
- A 'Food Safety Management Diary for Wild Game Meat Producers' is available from the FSA
Tel: 020 7276 8--- or E-mail: wildgameguidance@foodstandards.gsi.gov.uk

SCOPE

HACCP Plan Template

HACCP PLAN FOR:

Hazards:

- **Biological Safety:** to prevent, eliminate or reduce the microbiological contamination of meat and to reduce the potential for growth.
- **Physical and Chemical Safety:** to avoid the physical and chemical contamination of meat.

Product: Wild deer carcasses and in feather wild game birds

Intended use: Primal cuts (haunches etc) and oven ready birds

Process:

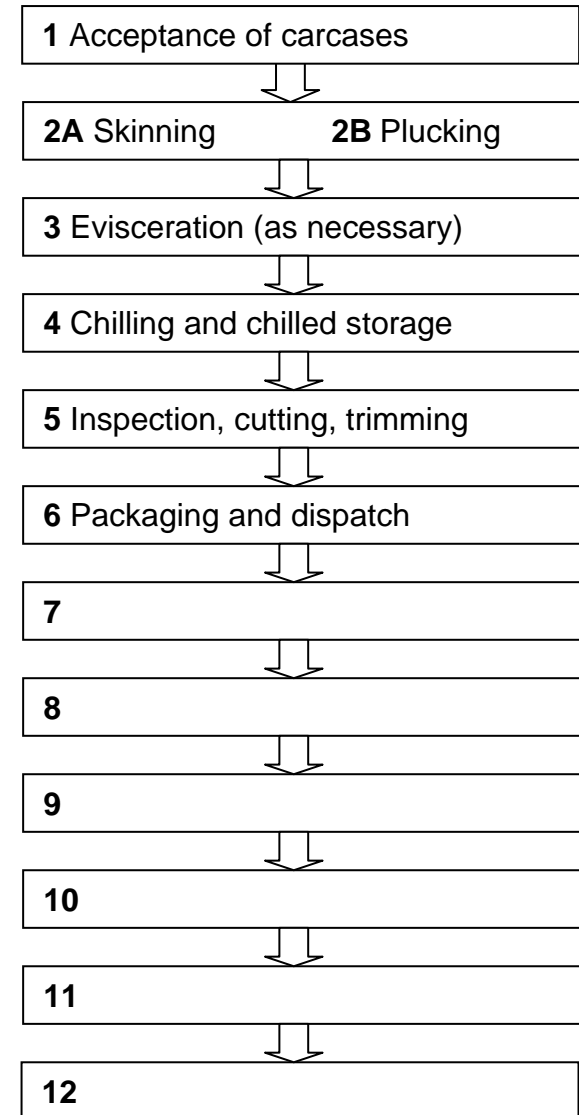
- Check condition of all carcasses at delivery including declarations and temperature
- Skin and pluck carcasses avoiding physical/chemical contamination of carcasses
- Eviscerate birds avoid contamination from pathogenic bacteria, dirt or faecal material
- Deer carcasses should already be eviscerated (at the shoot by the hunter/trained person) if not and suspected abnormality is reported on the trained person declaration notify the competent authority
- Place carcasses in chiller, (temperature - deer no more than 7°C, birds no more than 4°C) avoiding contamination particularly cross contamination between skinned/plucked game and in skin/feather carcasses
- Trim if necessary and present for official post mortem inspection
- Cut primals and package (check packaging equipment)
- Place in chiller until dispatch

Packaging, Storage, Distribution:

- Package primal cuts and oven ready birds in temperature controlled environment
- Keep products chilled until dispatch in refrigerated transport vehicles
- Follow cleaning/disinfection schedule for vehicles and check vehicle refrigeration before dispatch

Customers: Local butchers, hotels and restaurants. London wholesale market and retailers in France and Belgium

PROCESS STEPS



BELOW IS A HACCP TEMPLATE – COMPLETE ONE PAGE FOR EACH PROCESS STEP
SUBSEQUENT PAGES SHOW EXAMPLE ENTRIES FOR THE HIGHLIGHTED COLUMNS ON THE HACCP PLAN TEMPLATE, EXCLUDING DETAILS OF WHO IS RESPONSIBLE FOR ACTIONS OR WHAT RECORDS ARE KEPT

IMPORTANT: COMPLETE A COPY OF THIS PAGE FOR EACH PROCESS STEP - AMEND LOWER COLUMN HEADINGS # AS APPROPRIATE

PROCESS STEP: 1		NOTES
FOOD SAFETY HAZARDS AND CAUSES	CONTROL MEASURES	<p>A Critical Control Point (CCP) is a process step at which control is essential to prevent, eliminate or reduce a hazard to an acceptable level. The decision tree annexed to PART THREE Chapter 1 of the Meat Industry Guide may be used to help determine CCPs.</p> <p>If this process step is a CCP establish at least one critical limit, monitoring procedures and corrective actions for this step.</p> <p>If this process step is one of these:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Acceptance of carcasses (visual contamination / temperature) <input type="checkbox"/> Acceptance of raw meat (visual contamination / temperature) <input type="checkbox"/> Dressing Procedures (visual contamination) <input type="checkbox"/> Chilling/storage/dispatch (temperature) <p>it is a control point required by the regulations. If not identified as a CCP, establish a 'legal' limit, monitoring procedures and corrective actions for this step.</p>

# CP / CCP No	# CRITICAL / LEGAL LIMIT(S)	MONITORING PLAN				CORRECTIVE ACTION PLAN		
		Procedure	Frequency	Responsibility	Records	Procedures	Responsibility	Records
				Named person or job description	Complete as appropriate		Named person or job description	Complete as appropriate

Process Step 1 - Acceptance of carcasses

HAZARDS & CAUSES	CONTROL MEASURES	CRITICAL LEGAL LIMITS	MONITORING PLAN		CORRECTIVE ACTION PLAN
			Procedure	Frequency	
Carcasses derived from unhealthy animals and birds	<ul style="list-style-type: none"> ▪ Large wild game carcasses rejected if not accompanied by trained person's declaration and/or frozen ▪ Batches of small wild game carcasses rejected if not accompanied by trained person's declaration 	Presence of trained person's declaration Traceability requirement	Check each large wild game carcase has declaration.	Each batch/large wild game carcase	<ul style="list-style-type: none"> ▪ If pluck has been sent with carcase or suspected abnormality reported on declaration inform MHS Official ▪ Retrain / inform staff if procedure not followed. ▪ Report to/change supplier if no declaration is provided.
Contamination of carcasses from excessive dirt on hides or feathers	<ul style="list-style-type: none"> ▪ Game that cannot be skinned / plucked hygienically due to contamination on hides/feathers not accepted 		Pre-dressing check that standards are being met	Each delivery	<ul style="list-style-type: none"> ▪ Inform OV ▪ Retrain / inform staff ▪ Report to / change supplier ▪ Reject delivery
Contamination of carcasses from faecal material in abdominal or thoracic cavities due to "belly" shots or unhygienic gralloching	<ul style="list-style-type: none"> ▪ Game with contaminated abdominal or thoracic cavities not accepted 		Pre-dressing check that standards are being met	Each delivery	<ul style="list-style-type: none"> ▪ Inform OV ▪ Retrain / inform staff ▪ Report to / change supplier ▪ [Reject delivery]
Growth of pathogenic bacteria on carcasses due to too high temperature during transport or improper storage by supplier	<ul style="list-style-type: none"> ▪ Only accept chilled carcasses or carcasses shot the same day ▪ Only "un-heaped" game accepted 	Temperature through out the meat no more than: 7° C for large wild game 4° C for small wild game	Check carcase temperature using calibrated disinfected temperature probe		<ul style="list-style-type: none"> ▪ Report to / change supplier / haulier ▪ Check refrigeration equipment is working and carry out maintenance ▪ Retrain instruct staff ▪ [Reject delivery]

Process Step 2B – Plucking

HAZARDS & CAUSES	CONTROL MEASURES	CRITICAL LEGAL LIMITS	MONITORING PLAN		CORRECTIVE ACTION PLAN
			Procedure	Frequency	
Contamination of carcasses by pathogenic bacteria from plucking machine / surfaces	<ul style="list-style-type: none"> ▪ Company cleaning schedule followed ▪ Visual inspection before start up 		Refer to operating instructions including cleaning procedures [*] and usual supervisory activities / records		<ul style="list-style-type: none"> ▪ Re-assess adequacy of operating instructions ▪ Retrain / instruct staff if procedures not followed

Process Step 3 – Evisceration

HAZARDS & CAUSES	CONTROL MEASURES	CRITICAL LEGAL LIMITS	MONITORING PLAN		CORRECTIVE ACTION PLAN
			Procedure	Frequency	
Contamination of carcasses by pathogenic bacteria / faecal material from ruptured stomach / gut / crop	<ul style="list-style-type: none"> ▪ Trained staff instructed in evisceration techniques / procedures 	No visual contamination	Visual check of carcasses	Each game carcass	<ul style="list-style-type: none"> ▪ Carcasses correctly trimmed ▪ Check and if necessary, trim carcasses produced since last monitoring ▪ Investigate the cause of the failures, amend procedures as necessary ▪ Retrain / instruct staff if procedures not followed
Contamination of carcasses by pathogenic bacteria / faecal material from dirty knives / evisceration equipment	<ul style="list-style-type: none"> ▪ Knives / evisceration spoons rinsed and disinfected [between each large game carcass] ▪ Sanitiser water temperature [at least 82°C] 	Water temperature 82°C	Check on water temperature with probe thermometer	At start up and []	<ul style="list-style-type: none"> ▪ Remove knives to correctly operating sanitiser ▪ Adjust / repair water heater ▪ Retrain / instruct staff if procedures not followed
Contamination of carcasses by pathogenic bacteria on hands, arms, aprons of dressing staff	<ul style="list-style-type: none"> ▪ Trained staff instructed to wash and rinse hands, arms and aprons regularly 		Refer to operating instructions including personal hygiene procedures [*] and usual supervisory activities / records		<ul style="list-style-type: none"> ▪ Re-assess adequacy / frequency of washing / rinsing Retrain / instruct staff if procedures not followed

* Cross reference to instructions/procedures kept elsewhere

Process Step 4 – Chilling and chilled storage

HAZARDS & CAUSES	CONTROL MEASURES	CRITICAL LEGAL LIMITS	MONITORING PLAN		CORRECTIVE ACTION PLAN
			Procedure	Frequency	
Growth of pathogenic bacteria on carcasses / product due to too high chilling and storage temperature	<ul style="list-style-type: none"> ▪ Air temperature of chill store maintained at [x]°C ▪ Internal muscle temperature of chilled stored carcasses kept below 7°C for large and 4°C for small game ▪ Chiller alarm set at []°C ▪ Carcasses do not touch during cooling 	<ul style="list-style-type: none"> ▪ Carcase temperature reduced and maintained through out the meat at 7°C for large game and 4°C for small game within [x] hours 	Check automatic log of air temperature	[] times a day Test alarm [once a week]	<ul style="list-style-type: none"> ▪ If needed, move carcasses to a correctly functioning chill store ▪ Check / correct carcasses produced since the last monitoring showed this process was under control ▪ Retrain / instruct staff if procedures not followed
Growth of pathogenic bacteria on carcasses / product due to too slow chilling process/too long in chilling hall / close spacing carcasses during cooling / poor stock rotation in chill store	<ul style="list-style-type: none"> ▪ Carcasses stored in food grade polypropylene crates (birds) ▪ Trained staff instructed in chill and storage procedures, including correct carcase spacing 	Stock dispatched within [] days of kill date	Check on carcase temperature before loading using calibrated disinfected temperature probe Visual check of carcase spacing during cooling Check stock rotation	[] times a day [Once a day] [Once a day]	<ul style="list-style-type: none"> ▪ Reduce air temperature where carcasses are held ▪ Move carcasses to a correctly functioning room ▪ Check / correct carcasses produced since the last time monitoring showed this process was under control ▪ Investigate the cause of failures and amend procedures as necessary ▪ Move the carcasses to get the desired spacing ▪ Retrain / instruct staff if procedures not followed ▪ Destroy old stock

Contamination of carcasses / product by pathogenic bacteria, physical, chemical contaminants from dirty chill store/equipment	Plant and equipment cleaning and maintenance schedule followed		Refer to operating instructions including cleaning and maintenance procedures [*] and usual supervisory activities / records	<ul style="list-style-type: none"> ▪ Re-assess adequacy of operating instructions ▪ Retrain / instruct staff ▪ Re-assess adequacy / frequency of cleaning and maintenance schedule
Contamination of carcasses / product by pathogenic bacteria from store / handling staff	Trained staff instructed to follow personal hygiene procedures		Refer to operating instructions including personal hygiene procedures [*] and usual supervisory activities/records	<ul style="list-style-type: none"> ▪ Retrain / instruct staff ▪ Re-assess adequacy of operating instructions

Process Step 5 – Inspection, cutting, trimming

HAZARDS & CAUSES	CONTROL MEASURES	CRITICAL LEGAL LIMITS	MONITORING PLAN		CORRECTIVE ACTION PLAN
			Procedure	Frequency	
Contamination of meat by pathogenic bacteria from faecal material	Trained staff instructed to check product against agreed product specification before cutting	No visible contamination	Visual check	[Each carcass]	<ul style="list-style-type: none"> ▪ Product removed from line ▪ Carcasses trimmed / cleaned / reworked ▪ Product rejected / destroyed ▪ Check / correct carcasses produced since the last time monitoring showed this process was under control ▪ Investigate the cause of failures, amend procedures as necessary ▪ Retrain / inform staff if procedures not followed

* Cross reference to instructions/procedures kept elsewhere

Contamination of meat by pathogenic bacteria from other meat (especially of other species)	<ul style="list-style-type: none"> ▪ Meat handled in separate batches ▪ Trained staff instructed to handle meat of different species separately and to follow company hygiene procedures 		Refer to operating instructions including cleaning procedures between batches [*] and usual supervisory activities / records	<ul style="list-style-type: none"> ▪ Re-assess adequacy of operating instructions ▪ Retrain / instruct staff if procedures not followed
Contamination of meat by pathogenic bacteria / physical / chemical contaminants from knives / cutting tables / equipment during trimming	<ul style="list-style-type: none"> ▪ Trained staff instructed to follows operating, cleaning and staff hygiene procedures ▪ Two knife system used ▪ Batch sterilisers used for knives / chain mail, temperature [at least 82°C], checked with probe thermometer twice a day 	Water temperature 82°C	<p>Refer to operating instructions including cleaning and disinfection procedures [*] and usual supervisory activities / records</p> <p>Check water temperature At start up and []</p>	<ul style="list-style-type: none"> ▪ Re-assess adequacy of operating instructions ▪ Retrain / instruct staff if procedures nor followed ▪ Adjust/ repair water heater
Contamination of meat with metal fragments from broken knife blades / band saws and chain mail	<ul style="list-style-type: none"> ▪ Knives / chain mail checked for damage before and during use ▪ Regular maintenance checks on cutting equipment ▪ Metal detection at step [] 		Refer to operating instructions including maintenance procedures [*] and usual supervisory activities / records	<ul style="list-style-type: none"> ▪ Re-assess adequacy of operating instructions ▪ Retrain / instruct staff if procedures not followed
Contamination of meat by pathogenic bacteria / physical contaminants from cutting staff	<ul style="list-style-type: none"> ▪ Trained staff instructed to follow personal hygiene rules 		Refer to operating instructions including personal hygiene procedures [*] and usual supervisory activities / records	<ul style="list-style-type: none"> ▪ Re-assess adequacy of operating instructions ▪ Retrain / instruct staff if procedures not followed
Growth of pathogenic bacteria on meat due to poor temperature control from being too long in cutting room	<ul style="list-style-type: none"> ▪ Cutting room maintained below []°C ▪ Trained staff instructed to ensure product spends less than [x] minutes in cutting room 	<p>Cutting room temperature below [] °C</p> <p>Meat temperature below [] °C</p>	<p>Check air temperature [] times a day</p> <p>Check meat temperature [] times a day</p>	<ul style="list-style-type: none"> ▪ Move product to chiller ▪ Investigate the cause of high temperatures, amend procedures / repair temperature control equipment /monitoring equipment as necessary ▪ Retrain / instruct staff if procedures not followed

* Cross reference to instructions/procedures kept elsewhere

Process Step 6 – Package and dispatch

HAZARDS & CAUSES	CONTROL MEASURES	CRITICAL LEGAL LIMITS	MONITORING PLAN		CORRECTIVE ACTION PLAN
			Procedure	Frequency	
Growth of pathogenic bacteria due to inadequate temperature control at dispatch	<ul style="list-style-type: none"> ▪ Carcases / product chilled before dispatch below [x] °C ▪ Vehicle container chilled below [y] °C before loading 	Product temperature below: 7° C for large wild game 4° C for small wild game Vehicle air temperature below [y] °C before loading	Check carcass / product temperature before loading using calibrated disinfected temperature probe Check vehicle temperature before loading	[Sample from each load] [Each vehicle]	<ul style="list-style-type: none"> ▪ Stop despatch until meat reaches required temperature ▪ Investigate the cause, amend procedures as necessary ▪ Stop loading until vehicle reaches required temperature ▪ Retrain/instruct staff if procedures not followed
Contamination of carcasses / product by pathogenic bacteria from outer packaging during packing/loading process	<ul style="list-style-type: none"> ▪ Trained staff instructed in packing/loading procedures, including transport of game birds / product in food grade polypropylene crates palleted and over-wrapped 		Refer to operating instructions including packing and loading procedures [*] and usual supervisory activities / records		<ul style="list-style-type: none"> ▪ Re-assess adequacy of operating instructions ▪ Retrain / instruct staff if procedures not followed
Contamination of carcasses / product by pathogenic bacteria, physical, chemical contaminants from dirty vehicles	<ul style="list-style-type: none"> ▪ Cleaning and maintenance schedule for vehicles followed 		Refer to operating instructions including cleaning and maintenance procedures [*] and usual supervisory activities/ records		<ul style="list-style-type: none"> ▪ Re-assess adequacy of operating instructions ▪ Retrain / instruct staff if procedures not followed
Contamination of carcasses by pathogenic bacteria from loading staff	<ul style="list-style-type: none"> ▪ Trained staff instructed to follow personal hygiene procedures 		Refer to operating instructions including personal hygiene procedures [*] and usual supervisory activities / records		<ul style="list-style-type: none"> ▪ Re-assess adequacy of operating instructions ▪ Retrain / instruct staff if procedures not followed

* Cross reference to instructions/procedures kept elsewhere