

PAPER (05) 55

MHS PRIORITISATION

Executive Summary

1. This paper introduces the report of the project group for prioritisation of MHS activity.
2. The MHS Board is invited to:
 - **agree** the specification of outcomes required of the MHS;
 - **agree** the proposed priorities for both outcomes and the tasks undertaken by the MHS;
 - **note** that the agreed priorities will be captured into SLAs and the MHS Operations Manual; and
 - **note** the intention to review standards of performance over the coming year in light of the introduction of new meat hygiene regulations and any TSE risk management changes.

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MHS PRIORITISATION

Issue

1. To consider the report of the project group for prioritisation of MHS activity.

Background

2. Recommendation 2 of the Wall Report was for the MHS to agree with the FSA a mechanism for prioritising its activities with all its customers. Such a system is necessary to deliver recommendation 1 of the report, for SLAs to make MHS priorities clear and also contributes to recommendation 10 for the various parties to work together more effectively.
3. At the Board's meeting on 15 March it gave its agreement to proposals for developing a prioritisation system. That development is now complete, and the final report of the project group is attached. It has been produced in consultation with all stakeholders, including devolved administrations, and has been agreed by Debby Reynolds, Chief Veterinary Officer and Defra's Director General for Animal Health and Welfare.

Discussion

4. The report sets out the outcomes required of the MHS by its customers and proposes priorities for those outcomes. It then aligns the tasks the MHS carries out to those outputs and proposes priorities for those tasks. This process allows for production of both meaningful Service Level Agreements between the MHS and its customers and practical guidance for MHS operational staff.
5. Prioritisation was primarily based on the degree of risk being managed. However, some were subsequently adjusted to take account of factors other than risk to the consumer, such as legislative requirements and

public or political concerns. The basis for the priorities attached to MHS outcomes can be found in Annex 2 of the report.

6. The report also details current standards of performance required of the MHS and highlights where SLAs might be adjusted in the short term, and also in the longer term, following the introduction of new meat hygiene regulations and any TSE risk management changes.

MHS Board Action Required

7. The MHS Board is invited to:
 - **agree** the specification of outcomes required of the MHS;
 - **agree** the proposed priorities for both outcomes and the tasks undertaken by the MHS;
 - **note** that the agreed priorities will be captured into SLAs and the MHS Operations Manual; and
 - **note** the intention to review standards of performance over the coming year in light of the introduction of new meat hygiene regulations and any TSE risk management changes.

Prioritisation of MHS Activity

Report to MHS Board

1 July 2005

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1. Introduction

The Wall Report was commissioned in response to a failure by the Meat Hygiene Service (MHS) to comply with the requirements to test all relevant 24-30 month old casualty animals for BSE. The Report made a series of recommendations. A number of these recommendations related to issues of prioritisation.

In particular, Recommendations 1, 2 and 10 stated:

R1: Service Level Agreements and other similar documents should make it clear what the priority of an activity is and the standard expected for delivery, and include specific measures of technical performance. [...] This should be agreed between the MHS and the customer and reviewed periodically.

R2: The MHS should agree with the FSA a mechanism for prioritising its activities with all its customers.

R10: A more integrated service should be developed so that the various parties work together more effectively.

A workshop in December 04 confirmed the commitment and willingness of all parties to respond to the need for prioritisation, and identified the wide range of benefits to be gained. A small project group was set up to take this work forward. The group consisted of representatives from MHS, FSA and Defra (see Appendix 1 for membership).

The work undertaken created a framework within which the prioritisation of MHS activity can be undertaken, and an initial view was formulated of the priority to be attached to different activities. Wide consultation was then undertaken to allow all interested parties within the FSA, Defra, the devolved administrations and the MHS to contribute to the finalisation of the priorities to be set.

It has become clear that the process of prioritisation offers many benefits, including the opportunity to:

- Provide a clear linkage between customers' strategic direction and MHS activity
- Generate relevant and focused discussion between the MHS and its customers, resulting in active and informed agreement to priorities
- Promote recognition of what is achieved by the MHS
- Provide practical and useful guidance 'on the ground' as to the priority of different activity areas.

2. Overview

The work undertaken demonstrates the feasibility of setting clear priorities for the activity of the MHS. It also demonstrates the usefulness of the prioritisation process, reinforcing the recommendations of the Wall report.

The strategic goals of the MHS' customers should clearly drive the outcomes required of the MHS, and these outcomes should then in turn drive the tasks that are undertaken by MHS staff.

Details of how the current strategies of the FSA, Defra and devolved administrations translate into high level outcomes required of the MHS are set out.

It has been found that relatively detailed outcomes are required to enable prioritisation to take place. The high level outcomes required of the MHS have, therefore, been cascaded into more detailed outcomes in a form appropriate to allow prioritisation.

The prioritisation of outcomes has been undertaken primarily on the basis of the degree of risk being managed. The basis for differentiating levels of priority is based around the immediacy of the risk involved.

It is also clear however, that factors other than risk may come into play in determining priorities, not least legislative requirements or public or political concerns. In a limited number of areas, primarily those related to SRM controls, the priority of outcomes has been adjusted on this basis.

A clear mapping between the detailed outcomes and the actual tasks undertaken by the MHS has been set out. This allows customers to understand how outcomes will be delivered. It also leads to a clear understanding of the purpose behind the tasks the MHS undertakes.

The customers of the MHS will be primarily interested in discussing prioritisation of outcomes. MHS staff, however, are likely to find prioritisation of tasks more helpful, as it will provide practical guidance on the activity they undertake. Prioritisation of tasks has also therefore been undertaken.

The standard to which a task is performed should be linked to the priority of the outcomes that it helps to deliver. The current standards of performance are set out, and anomalies highlighted. The impact of forthcoming EU hygiene regulations, which puts greater responsibility on operators, is also noted.

3. Consultation

Comment was invited from all interested parties within the FSA, Defra, the devolved administrations and the MHS.

Stakeholders were invited to comment on:

- The completeness of the outcomes required from the MHS
- The initial priority set for each outcome
- The initial priorities set out for the tasks undertaken by the MHS
- The standard to which tasks should be undertaken now and in the future.

Comments were primarily concerned with offering refinements to wording and adding to the evidence cited in determining priorities. There were no suggestions for change to any of the initial priorities proposed.

4. Outcomes required of MHS

Customers of the MHS are primarily interested in agreeing the outcomes they require. However, while tasks are set out in the MHS operations manual, outcomes have not been consistently specified either in SLAs or MHS internal documentation. It has been necessary therefore to create a clear specification of the outcomes required of the MHS.

This development of outcomes links well with Defra's current work on its delivery strategy. This is aiming to improve partnership working with delivery agents, so that Defra manages its delivery partners in a way which reduces the control on how they deliver towards a focus on achieving agreed outcomes.

Customers' strategic goals

It is important that the strategic goals of the MHS' customers clearly drive the requirements placed upon the MHS. From these strategic goals it is then possible to generate the outcomes required of the MHS.

For the FSA the key strategic goal relevant to the MHS from its 2005-2010 strategy is:

“To further reduce foodborne illness”

The key strategic goals relevant to the MHS that results from Defra's vision are:

“Animal health and the welfare of kept animals is improved, and society, the economy and the environment are protected from the impact of animal diseases, through sharing the management of risk with industry”

“Our disease status is amongst the highest in the world and we are able to trade our animals and animal products internationally”

High level outcomes

The high level outcomes required in pursuit of these strategic goals and relevant to the MHS have been specified as:

- To limit foodborne illness caused by meat
- To detect and control animal disease

- To achieve high standards of animal welfare in licensed premises
- To facilitate the international trade of animal products

Second level outcomes

Each of these very high level outcomes can be described in more detail, a level at which the role and activity of the MHS is brought more clearly into focus. These second level outcomes are set out in detail in Table 1.

<i>High level outcome</i>	<i>Second level outcome</i>
To limit foodborne illness caused by meat	Meat is produced from healthy animals raised under hygienic conditions
	Contamination of meat is minimised
	TSE infectivity in meat is minimised
	There is clear identification of meat fit for human consumption
	Meat premises waste, including SRM, does not enter the food chain
To detect and control animal disease	There is effective identification and timely notification of suspect disease in animals
	The potential spread of disease by animals is minimised
	The potential spread of disease by animal transport vehicles is minimised
	The potential spread of disease by meat premises waste is minimised
	Developing risks / patterns are identified and used to improve control and management of disease
To achieve high standards of animal welfare in licensed premises	Cases of poor welfare which have happened prior to arrival at licensed premises are identified and acted upon
	There are high standards of care from arrival to the point of slaughter
	There is humane slaughter
To facilitate the international trade of animal products	Arrangements on licensed premises comply with third country export requirements

Detailed outcomes

It has been found, however, that a third level of detail is generally required to allow useful discussion about priorities. Second level outcomes are generally still at too high a level of aggregation to allow sensible differentiation in terms of priority. A third level of detail allows differentiation of priorities while remaining at a level where customers can realistically engage in fruitful and informed discussion with the MHS. Table 2 sets out the detailed level outcomes

Table 2

MHS DETAILED OUTCOMES

High level outcomes	Second level outcomes	Detailed level outcomes	
To limit foodborne illness caused by meat	Meat is produced from healthy animals, raised under hygienic conditions	Only properly identified animals are accepted for slaughter	
		Only healthy animals are slaughtered for human consumption	
		Unsatisfactory residues of veterinary medicines or banned substances are detected	
		Meat exhibiting abnormalities is rejected	
	Contamination of meat is minimised		Only clean animals are slaughtered for human consumption
			Animals are stunned and bled with minimal contamination
			Carcases are skinned, dehaired or plucked with minimal contamination
			Carcases are eviscerated with minimal contamination
			Meat is chilled following inspection and kept refrigerated to inhibit bacterial growth
			Cross-contamination of meat is minimised during further handling, storing, cutting and processing
	TSE infectivity in meat is minimised		Meat entering the food chain is free from SRM
			Animals requiring BSE/TSE testing are identified and tested
			Meat from all animals tested for BSE/TSE does not enter the food chain unless tested negative
			Meat from over-age cattle does not enter the food chain
			Imported carcasses meet UK requirements for the removal of SRM
	There is clear identification of meat fit for human consumption	There is appropriate health marking of animal products fit for human consumption	
	Meat premises waste, including SRM, does not enter the food chain		Animal by-products are accurately and reliably categorised
Animal by-products are securely collected, stained where necessary, and dispatched to appropriate premises			
To detect and control animal disease	There is effective identification and timely notification of suspect disease in animals	Signs of notifiable disease in animals are identified	
		Signs of notifiable disease in carcasses are identified	
		There is immediate notification of suspect notifiable diseases to State Veterinary Service	
	The potential spread of disease by animals is minimised		On suspect notifiable disease cases, instructions from the State Veterinary Service are followed promptly
			Conditions of holding livestock minimise spread of disease
			Time to slaughter minimises risk of spread of disease
	The potential spread of disease by animal transport vehicles is minimised	Micro-organisms do not remain on animal transport vehicles or crates	
	The potential spread of disease by meat premises waste is minimised		Animal by-products are accurately and reliably categorised
			Animal by-products are securely collected, stained where necessary, and dispatched to appropriate premises
	Developing risks/patterns are identified and used to improve control and management of disease	There is on-going disease surveillance	
To achieve high standards of animal welfare	Cases of poor welfare which have happened prior to arrival at licensed premises are identified and acted upon	There is effective identification of visible signs of abuse or neglect on live animals and on carcasses.	
		Prompt action is taken to relieve suffering where this is required	
		Relevant authorities are notified promptly of poor welfare prior to arrival to allow investigation and action to be taken	
	There are high standards of care from arrival to the point of slaughter	Lairage conditions and animal handling promote good animal welfare	
	There is humane slaughter		Slaughter procedures meet agreed welfare standards
			Slaughter is undertaken by competent and appropriately trained operatives
			Prompt action is taken where unacceptable slaughter procedures are identified
To facilitate the trade of animal products internationally	Arrangements on licensed premises comply with third country export requirements	Plants maintain approval for export to third countries	
		Products of animal origin are eligible for export	

5. Basis for deciding priority of an outcome

The overarching aim is to generate a proportionate response to risk. Prioritisation in the first instance should therefore be a reflection of the degree of risk being managed.

This also reflects the fact that both the FSA and Defra, the two key customers of the MHS, are committed to evidence based assessment of risk. Such evidence based assessment allows an objective determination of the priority of an outcome.

It is also clear however, that other factors may come into play, and it is appropriate in certain circumstances that the evidence-based determination of priority is modified. In particular:

- Legal requirements or European Community audits may insist on certain priorities
- Public or political perceptions of risk may differ from evidence based assessments
- The number of other control points in the food / feed chain may moderate the risk resulting from an area under MHS supervision
- Activity, if given a certain priority, might have a disproportionate impact on industry.

Evidence based determination of priorities

The evidence based determination of priorities categorises outcomes in relation to the level of risk or threat being managed. In particular, it is proposed that the priority levels differentiate between the management of immediate threats, potential threats and ongoing assurance of effective risk management:

*Outcomes that are in support of the management of **immediate** and **specific** threats will be deemed **high** priority*

*Outcomes that are in support of the management of **potential** threats will be deemed **medium** priority*

*Outcomes that are in support of the management of low level threats or in support of **ongoing assurance** that there are appropriate controls and procedures in place to manage risk will be deemed **low** priority.*

These categories apply equally to public health, animal health and animal welfare.

It is important to remember that because outcomes are lower priority does not mean they are unimportant, it is a statement of the priority with which they are undertaken and the level of risk attached to different areas.

High priority relates to where immediate and specific threats must be managed:

- In the area of animal welfare this would relate to immediate and specific threats of unnecessary pain and/or unnecessary distress (linking to Category D of the welfare criteria)
- In the area of public health it will relate to immediate and specific threats in relation to hazards causing foodborne illness or fatalities
- In the area of animal health it will relate to suspected cases of notifiable disease

Medium priority will be given to those outcomes which support the management of potential threats. These include areas where:

- If action is not taken, over time a more serious level of threat might arise
- Where an actual threat would occur only if there was a cumulative failure in this outcome **and** others

Low priority captures those outcomes that assure effective ongoing management of risk, and would include the encouragement of best practice.

Table 3

MHS OUTCOME PRIORITISATION

High level outcomes	Second level outcomes	Detailed level outcomes	Risk Based Priority	Adjusted Priority	
To limit foodborne illness caused by meat	Meat is produced from healthy animals, raised under hygienic conditions	Only properly identified animals are accepted for slaughter	M		
		Only healthy animals are slaughtered for human consumption	L		
		Unsatisfactory residues of veterinary medicines or banned substances are detected	L		
		Meat exhibiting abnormalities is rejected	L	M	
	Contamination of meat is minimised	Only clean animals are slaughtered for human consumption	M		
		Animals are stunned and bled with minimal contamination	L		
		Carcases are skinned, dehaired or plucked with minimal contamination	M		
		Carcases are eviscerated with minimal contamination	M		
		Meat is chilled following inspection and kept refrigerated to inhibit bacterial growth	L		
		Cross-contamination of meat is minimised during further handling, storing, cutting and processing	L		
	TSE infectivity in meat is minimised	Meat entering the food chain is free from SRM	L	H	
		Animals requiring BSE/TSE testing are identified and tested	L	H	
		Meat from all animals tested for BSE/TSE does not enter the food chain unless tested negative	M	H	
		Meat from over-age cattle does not enter the food chain	L	H	
		Imported carcasses meet UK requirements for the removal of SRM	L		
	There is clear identification of meat fit for human consumption	There is appropriate health marking of animal products fit for human consumption	L		
	Meat premises waste, including SRM, does not enter the food chain	Animal by-products are accurately and reliably categorised	M		
		Animal by-products are securely collected, stored where necessary, and dispatched to appropriate premises	M		
	To detect and control animal disease	There is effective identification and timely notification of suspect disease in animals	Signs of notifiable disease in animals are identified	M	
			Signs of notifiable disease in carcasses are identified	M	
There is immediate notification of suspect notifiable diseases to State Veterinary Service			H		
The potential spread of disease by animals is minimised		On suspect notifiable disease cases, instructions from the State Veterinary Service are followed promptly	H		
		Conditions of holding livestock minimise spread of disease	L		
		Time to slaughter minimises risk of spread of disease	L		

Table 3 (cont.)

MHS OUTCOME PRIORITISATION

High level outcomes	Second level outcomes	Detailed level outcomes	Risk Based Priority	Adjusted Priority
To detect and control animal disease (continued)	The potential spread of disease by animal transport vehicles is minimised	Micro-organisms do not remain on animal transport vehicles or crates	M	
	The potential spread of disease by meat premises waste is minimised	Animal by-products are accurately and reliably categorised	M	
		Animal by-products are securely collected, stained where necessary, and dispatched to appropriate premises	M	
	Developing risks/patterns are identified and used to improve control and management of disease	There is on-going disease surveillance	L	
To achieve high standards of animal welfare	Cases of poor welfare which have happened prior to arrival at licensed premises are identified and acted upon	There is effective identification of visible signs of abuse or neglect on live animals and on carcasses.	M	
		Prompt action is taken to relieve suffering where this is required	H	
		Relevant authorities are notified promptly of poor welfare prior to arrival to allow investigation and action to be taken	M	
	There are high standards of care from arrival to the point of slaughter	Lairage conditions and animal handling promote good animal welfare	L	
	There is humane slaughter	Slaughter procedures meet agreed welfare standards	L	
		Slaughter is undertaken by competent and appropriately trained operatives	M	
		Prompt action is taken where unacceptable slaughter procedures are identified	H	
To facilitate the trade of animal products internationally	Arrangements on licensed premises comply with third country export requirements	Plants maintain approval for export to third countries	L	
		Products of animal origin are eligible for export	L	

6. Outcome priorities

Table 3 shows the priority to be attached to each outcome. It shows the risk based priority for each outcome, and where this has been adjusted for reasons of legislation, public perception or other issues, it shows the 'adjusted priority'. Appendix 2 sets out the reasoning behind the priorities allocated. Some key points are summarised below.

It should be noted that these priorities apply for normal day-to-day operation of the MHS. Where disease or health alerts have been raised priorities will be adapted to reflect the alert status.

It should also be noted that during audit or inspection the MHS may find suspect animals or carcasses or critical failures by the operator. Dealing with these exceptions is always treated as high priority, whatever the priority of the outcome that led to the exception being identified.

In general there are a limited number of areas where the MHS outcomes deal with immediate and specific risks. These are primarily:

- To relieve suffering in animals where this is required, particularly at the point of arrival at licensed premises
- To take immediate action where there is suspect notifiable disease
- Where abnormal animals or carcasses are identified.

The high priority attached to such areas reflects the higher level of threat being managed in these areas.

It is clear from the work undertaken, however, that the predominant role of the MHS is to support the management and control of **potential**, rather than immediate, threats to public health, animal health and animal welfare. The priority attached to activities reflects this.

Limiting foodborne illness

One of the most important contributions to limiting foodborne illness is through minimising the contamination of meat during production.

In the normal course of events it is healthy animals, properly managed that are presented to the slaughterhouse, and operator's procedures follow accepted practice. The MHS contributes to minimising the potential for meat to contain pathogens harmful to humans through its audit of operator's procedures and relevant inspections. As the focus is primarily on managing potential threats or assuring proper procedures are in place outcomes are mostly in the medium or low categories. It should also be recognised that most foodborne illness requires failure of other control points in the foodchain, for example on the farm or in the kitchen, not least failure to properly cook meat.

Of course, where the MHS identifies a failure of operator's controls to minimise contamination on meat there exists an immediate and specific public health threat that must be dealt with as high priority.

The consumption of meat premises waste also represents a significant potential threat to humans. Appropriate categorisation and disposal of waste is therefore important. There are currently no public health problems being reported due to the consumption of animal by-products, however, this area presents a continuing potential threat to health if not managed appropriately.

Finally, it should be noted that visible health of animals is not a good indicator of whether animals are carrying organisms that commonly cause disease in humans. The outcome relating to only healthy animals being slaughtered for consumption is therefore low priority.

Limiting foodborne illness - adjustments to risk based prioritisation

There are only two areas in which it is proposed that risk based prioritisation is changed:

- The priority attached to rejecting meat with abnormalities
- The priority attached to all outcomes related to the minimisation of TSE infectivity

Rejecting meat with abnormalities

Rejecting meat exhibiting abnormalities at post mortem inspection provides a low level of contribution to the management of foodborne illness (see Appendix 2). However, it is a legislative requirement to ensure that meat is not only safe for human consumption, but also 'fit' or otherwise suitable for

consumption. This is effectively achieved through post mortem inspection and the rejection of abnormalities. The priority of this outcome has therefore been raised.

Minimising TSE infectivity

The scientific evidence is that risk from TSE infectivity is now low. The ban on feeding mammalian protein to ruminants has resulted in a decline in cases of BSE from over 36,000 at the peak of the epidemic in 1994 to just over 300 in 2004, and SRM controls effectively remove the bulk of infectivity from any infected cattle that might enter the food chain.

However, it is clear that considerable public concern remains about TSE infectivity in meat. It is also clear that current consideration being given to replacing the OTM rule with BSE testing relies on confidence that TSE testing and SRM control procedures are robust. The need to maintain that confidence suggests that TSE controls be given high priority. This is particularly the case given that the cost to the public purse of retaining the OTM rule is £1m per day.

Detection and control of animal disease

Where a suspect case of notifiable disease has been identified there exists an immediate and specific threat that must be dealt with as high priority. The high priority relates to both the notification of the State Veterinary Service and then promptly following instructions received.

In other areas, as with foodborne illness, the role of the MHS is to assist in the management of potential threats from animal disease, and to provide on-going assurance that procedures minimise the risks from animal disease.

There was no requirement identified to adjust risk based priorities.

Animal welfare

It is high priority to take action promptly to relieve suffering where this is required as there is an immediate and specific threat to animal welfare. This is particularly relevant at the point of arrival at licensed premises. It is also essential to act quickly where unacceptable slaughter procedures are identified as this could also pose an immediate threat to animal welfare.

Other outcomes relate to the management of potential threats to animal welfare or assurance of good housing conditions and animal handling.

There was no requirement identified to adjust risk based priorities.

7. The tasks of the MHS

It is important to note that it is first, and foremost, the operator's responsibility to put in place proper procedures that comply with legislative requirements and industry good practice to ensure the safe production of meat. This is clearly re-emphasised under the new EU hygiene regulations which come into force in 2006.

Under the new regulations the MHS is responsible for:

- Auditing that the operator has suitable procedures and controls
- Certain specified inspections of animals and carcasses set down in legislation
- Certain other duties, including supervision or taking of samples.

In some areas the MHS supplements its regular audit of operator's procedures with more frequent verification of the operator's activity. This can involve, for instance, checking random samples, but can currently also include 100% verification.

Table 4 sets out at high level the tasks of the MHS.

<i>Table 4</i>	
MHS TASKS	
STAGE	TASKS

Pre-slaughter	Audit Tasks	Audit operator's controls of in-coming animals
		Audit operator's disease control procedures
		Deal with audit non-compliance
	Inspection Tasks	Ante-mortem inspection
		Deal with ante-mortem exceptions
		Select animals for routine testing
		Inspect lairage operation
	Vehicle cleansing & disinfection	
Slaughter	Audit Tasks	Audit operator's compliance with Welfare of Animals (Slaughter or Killing) Regulations (WASK)
		Audit operator's hygiene controls
		Audit SRM controls at slaughter
	Deal with audit non-compliance	
	Other Duties	License slaughterers
Post-slaughter	Audit Tasks	Audit operator's hygiene controls
		Audit operator's SRM controls post slaughter
		Deal with audit non-compliance
	Inspection Tasks	Dentition checks
		Post-mortem inspection
		Inspect removal of SRM
		Deal with meat found unfit at inspection
		Sampling
		Control of sampled carcasses
		Inspection of imported carcasses
	Other Duties	Marking of carcasses
		Collection and communication of inspection data
		Audit operator against third country controls
Certification		
By-Products Control	Audit Tasks	Audit operator's by-product controls
		Deal with audit non-compliance

8. Delivering the desired outcomes

The activity of the MHS is structured to deliver the outcomes required by its customers. Table 5 below sets out which MHS tasks contribute to the different outcomes. It is included to allow customers to understand the process by which their outcomes are delivered. The prioritisation of the MHS' tasks and their link to outcomes is dealt with in section 8.

Table 5

OUTCOMES WITH RELATED MHS TASKS

Second level outcomes	Detailed level outcomes	Adjusted Priority	Related tasks
Meat is produced from healthy animals, raised under hygienic conditions	Only properly identified animals are accepted for slaughter	M	Audit operator's controls of in-coming animals
			Deal with audit non-compliance (in-coming controls)
	Only healthy animals are slaughtered for human consumption	L	Audit operator's controls of in-coming animals
			Deal with audit non-compliance (in-coming controls)
			Ante-mortem inspection
			Deal with ante-mortem exceptions
	Unsatisfactory residues of veterinary medicines or banned substances are detected	L	Select animals for routine testing
			Sampling (routine residues)
			Ante-mortem inspection
			Post-mortem inspection
	Meat exhibiting abnormalities is rejected	M	Sampling (suspect carcasses)
			Post-mortem inspection
			Deal with meat found unfit at inspection
Control sampled carcasses			
Microbiological contamination of meat is minimised	Only clean animals are slaughtered for human consumption	M	Audit operator's controls of in-coming animals
			Deal with audit non-compliance (in-coming controls)
			Ante-mortem inspection
			Deal with ante-mortem exceptions
	Animals are stunned and bled with minimal contamination	L	Audit operator's hygiene controls at slaughter
			Deal with audit non-compliance (slaughter)
	Carcasses are skinned, dehaired or plucked with minimal contamination	M	Audit operator's hygiene controls post-slaughter
			Deal with audit non-compliance (post-slaughter)
			Post mortem inspection
			Deal with meat found unfit at inspection
	Carcasses are eviscerated with minimal contamination	M	Audit operator's hygiene controls post-slaughter
			Deal with audit non-compliance (post-slaughter)
			Post mortem inspection
			Deal with meat found unfit at inspection
	Meat is chilled following inspection and kept refrigerated to inhibit bacterial growth	L	Audit operator's hygiene controls post-slaughter
			Deal with audit non-compliance (post-slaughter)
	Cross-contamination of meat is minimised during further handling, storing, cutting and processing	L	Audit operator's hygiene controls post-slaughter
			Deal with audit non-compliance (post-slaughter)

Table 5 (cont.)

OUTCOMES WITH RELATED MHS TASKS

Second level outcomes	Detailed level outcomes	Adjusted Priority	Related tasks
TSE infectivity in meat is minimised	Meat entering the food chain is free from SRM	H	Audit SRM controls at slaughter
			Deal with audit non-compliance (slaughter)
			Audit operator's SRM controls post-slaughter
			Deal with audit non-compliance (post-slaughter)
			Inspect removal of SRM
			Dentition checks
			Deal with meat found unfit at inspection
			Marking of carcasses
	Animals requiring BSE/TSE testing are identified and tested	H	Verify passport validity
			Dentition checks
			Sampling (BSE)
	Meat from all animals tested for BSE/TSE does not enter the food chain unless tested negative	H	Control sampled carcasses
	Meat from over-age cattle does not enter the food chain	H	Audit operator's controls of in-coming animals
			Verify passport validity
	Imported carcasses meet UK requirements for the removal of SRM	L	Inspection of imported carcasses
Marking of carcasses			
There is clear identification of meat fit for human consumption	There is appropriate health marking of animal products fit for human consumption	L	Marking of carcasses
Meat premises waste, including SRM, does not enter the food chain	Animal by-products are accurately and reliably categorised	M	Audit operator's by-product controls
	Animal by-products are securely collected, stained where necessary, and dispatched to appropriate premises		Deal with audit non-compliance (by-products)
There is effective identification and timely notification of suspect disease in animals	Signs of notifiable disease in animals are identified	M	Audit operator's by-product controls
			Deal with audit non-compliance (by-products)
	Signs of notifiable disease in carcasses are identified	M	Ante-mortem inspection
			Deal with ante-mortem exceptions
			Post mortem inspection
	There is immediate notification of suspect notifiable diseases to State Veterinary Service	H	Sampling (suspect carcasses)
Control sampled carcasses			
The potential spread of disease by animals is minimised	On suspect notifiable disease cases, instructions from the State Veterinary Service are followed promptly	H	<i>Follow instructions as given</i>
	Conditions of holding livestock minimise spread of disease	L	Inspect lairage operation
	Time to slaughter minimises risk of spread of disease	L	Audit operator's disease control procedures

Table 5 (cont.)

OUTCOMES WITH RELATED MHS TASKS

Second level outcomes	Detailed level outcomes	Adjusted Priority	Related tasks
The potential spread of disease by animal transport vehicles is minimised	Micro-organisms do not remain on animal transport vehicles or crates	M	Vehicle cleansing and disinfection
Developing risks/patterns are identified and used to improve control and management of disease	There is on-going disease surveillance	L	Select animals for routine testing
			Sampling (survey work)
			Collection and communication of inspection data
Cases of poor welfare which have happened prior to arrival at licensed premises are identified and acted upon	There is effective identification of visible signs of abuse or neglect on live animals and on carcasses.	M	Audit operator's controls of in-coming animals
			Deal with audit non-compliance (in-coming controls)
			Ante-mortem inspection
			Deal with ante-mortem exceptions
			Post mortem inspection
	Deal with meat found unfit at inspection		
	Prompt action is taken to relieve suffering where this is required	H	Deal with ante-mortem exceptions
	Relevant authorities are notified promptly of poor welfare prior to arrival to allow investigation and action to be taken	M	Deal with ante-mortem exceptions Deal with meat found unfit at inspection
There are high standards of care from arrival to the point of slaughter	Lairage conditions and animal handling promote good animal welfare	L	Inspect lairage operation
There is humane slaughter	Slaughter procedures meet agreed welfare standards	L	Audit operator's compliance with WASK Deal with audit non-compliance (slaughter)
	Slaughter is undertaken by competent and appropriately trained operatives	M	License slaughterers
	Prompt action is taken where unacceptable slaughter procedures are identified	H	Audit operator's compliance with WASK
			Deal with audit non-compliance (slaughter)
Arrangements on licensed premises comply with third country export requirements	Plants maintain approval for export to third countries	L	Audit operator against third country controls Certification
	Products of animal origin are eligible for export	L	Marking of carcasses

9. Prioritisation of tasks

Outcomes provide an extremely valuable basis for discussing priorities between the MHS and its customers. To have the maximum value, however, also requires prioritisation of the actual tasks undertaken by MHS staff. This translates outcome priorities into priorities in action.

The following principles have been used in assessing the priority of tasks:

- The priority of a task should be influenced by the priority of the outcomes it helps to deliver, modified by how critical the task is in the delivery of the outcome
- Audit tasks generally provide ongoing assurance that proper controls and procedures are in place, and are likely to be low priority
- Where audit non-compliance is identified the priority of the required action will depend on importance of the non-compliance, whether it is a minor, major or critical non-compliance. Dealing with critical non-compliance is always high priority as an immediate risk is evident.

Table 6 shows the initial priorities given to MHS tasks. The following points should be noted:

- The audit of operator's controls of in-coming animals is a low priority task, as it provides ongoing assurance of appropriate controls. However, the proper control of in-coming animals is essential to SRM controls through the identification of OTM or over-age cattle or other cattle that require BSE testing. Given the current high priority attached to SRM controls, the audit is presently supplemented by verification by the MHS of passports, ID and food chain information. This verification is high priority.
- While ante-mortem inspection is a medium priority task, dealing with issues identified at ante-mortem inspection is a high priority task as we have moved from the management of potential threats to recognition that there may be an immediate and specific threat
- The regular audit of slaughter procedures is supplemented with frequent observation by MHS staff of stunning and slaughter to ensure any unacceptable procedures are quickly identified
- In view of the importance attached to SRM controls following the recognition of vCJD the MHS was instructed to carry out continuous verification of operator's SRM controls in addition to the regular audit
- Post-mortem inspection was given medium priority for its role in removing abnormalities from the food chain. Most green (alimentary tract) offal does not enter the food chain and the parts that do are largely free from abnormalities and are processed. The inspection of green offal is therefore low priority
- Dealing with meat found unfit at post mortem inspection or when inspecting the removal of SRM is a high priority task as we have moved from the management of potential threats to recognition that there may be an immediate and specific threat
- Dentition checks are an important part of ensuring meat from over-age animals does not enter the food chain, and is an important part of SRM controls. These checks are therefore high priority for cattle; they are medium priority for sheep as no evidence of BSE in sheep has yet been found so only a potential threat exists
- The control of sampled carcasses is high priority; suspect carcasses and carcasses tested for BSE are treated as an immediate and specific threat until tested negative
- Marking of carcasses is low priority; although it is linked to high priority outcomes, including SRM control, it is not a critical control point
- Audit of operator's controls of by-products are currently supplemented by regular verification of the categorisation and staining of waste.

Table 6

MHS TASK PRIORITISATION

STAGE	TASKS	DETAIL	Task Priority	RELATED OUTCOMES	Outcome Priority	
Pre-slaughter	Audit Tasks	Audit operator's controls of incoming animals	L	Audit operator controls	M	
				Food chain information (FCI)	H	
				ID	M	
				Clean Livestock Policy (CLP)	L	
				Health	M	
		Welfare				
		Verify passports, food chain information and ID validity	H	Only properly identified animals are accepted for slaughter	M	
				Animals requiring BSE/TSE testing are identified and tested	H	
				Meat from overage cattle does not enter the food chain	H	
		Audit operator's disease control procedures	L	Time to slaughter minimises risk of spread of disease	L	
	Conditions of holding livestock minimise the spread of disease			L		
	Deal with audit non-compliance	Minor	L	As for 'Audit operator's controls of incoming animals', 'Audit operator's disease control procedures'		
		Major			M	
		Critical			H	
	Inspection Tasks	Ante-mortem inspection	Health inspection	M	Only healthy animals are slaughtered for human consumption	L
					Unsatisfactory residues of veterinary medicines or banned substances are detected	L
					Signs of notifiable disease in animals are identified	M
		Welfare inspection		M	There is effective identification of visible signs of abuse or neglect on live animals and on carcasses	M
					CLP verification	M
		Deal with ante-mortem exceptions	Examine and make diagnosis	H	As for 'Ante-mortem inspection'	
Accept, accept with conditions or reject for slaughter						
Select for testing						
Relieve suffering						H
Notify relevant authorities / others where required						H
				Relevant authorities are notified promptly of poor welfare prior to arrival to allow investigation and action to be taken	M	

Table 6 (cont.)

MHS TASK PRIORITISATION

STAGE	TASKS	DETAIL	Task Priority	RELATED OUTCOMES	Outcome Priority	
Pre-slaughter (cont.)	Inspection Tasks (cont.)	Select animals for routine testing		L	Unsatisfactory residues of veterinary medicines or banned substances are detected	L
		Inspect lairage operation	Hygiene	L	There is on-going disease surveillance	L
			Welfare (WASK)		Lairage conditions and animal handling promote good animal welfare	L
		Vehicle C&D		M	Micro-organisms do not remain on animal transport vehicles or crates	M
Slaughter	Audit Tasks	Audit operator's compliance with WASK	Audit operator's procedures	L	Slaughter procedures meet agreed welfare standards	L
			Observe stunning and slaughter	H	Prompt action is taken where unacceptable slaughter procedures are identified	H
		Audit operator's hygiene controls	Audit operator's procedures	L	Animals are stunned and bled with minimal contamination	L
		Audit SRM controls at slaughter	Audit operator controls	L	Meat entering the food chain is free from SRM	H
			Inspect SRM controls	H		
		Deal with audit non-compliance	Minor	L	<i>As for 'Audit operator's compliance with WASK', 'Audit operator's hygiene controls', 'Audit SRM controls'</i>	L
	Major		M			
	Critical		H			
Other Duties	License slaughterers		M	Slaughter is undertaken by competent and appropriately trained operatives	M	
Post-slaughter	Audit Tasks	Audit operator's hygiene controls	Hazard Analysis of Critical Control Points (HACCP)	L	Meat is chilled following inspection and kept refrigerated to inhibit bacterial growth	L
			Audit Good Hygiene Practice (GHP)	L	Cross-contamination of meat is minimised during further handling, storing, cutting and processing	L
			Verify hygiene controls	M	Carcases are skinned, dehaired or plucked with minimal contamination	M
		Carcases are eviscerated with minimal contamination			M	
		Audit operator's SRM controls post slaughter	Audit operator's controls	L	Meat entering the food chain is free from SRM	H
			Inspect SRM controls	H		
			Dentition checks (cattle)	H		
		Deal with audit non-compliance	Minor	L	<i>As for 'Audit operator's hygiene controls', 'Audit operator's SRM controls'</i>	
			Major	M		
			Critical	H		

Table 6 (cont.)

MHS TASK PRIORITISATION

STAGE	TASKS	DETAIL	Task Priority	RELATED OUTCOMES	Outcome Priority					
Post-slaughter (cont.)	Inspection Tasks	Dentition checks	Sheep	M	Meat entering the food chain is free from SRM	H				
					There is appropriate health marking of animal products fit for human consumption	L				
			Cattle	H	Animals requiring BSE/TSE testing are identified and tested	H				
					Meat from over-age cattle does not enter the food chain	H				
		Post-mortem inspection	Carcase	M	Meat exhibiting abnormalities is rejected	M				
					Unsatisfactory residues of veterinary medicines or banned substances are detected	L				
					Carcases are skinned, dehaired or plucked with minimal contamination	M				
					Carcases are eviscerated with minimal contamination	M				
					Signs of notifiable disease in carcasses are identified	M				
					There is effective identification of visible signs of abuse or neglect on live animals and on carcasses	M				
					Red offal	M	Meat exhibiting abnormalities is rejected	M		
		Green offal	L	Meat exhibiting abnormalities is rejected	M					
		Inspect removal of SRM		H	Meat entering the food chain is free from SRM	H				
		Deal with meat found 'unfit' at inspection	Examine and make diagnosis Detain and re-inspect Reject Additional examinations Seizure and condemnation Notify relevant authorities/ others where required	H	<i>As for 'Post-mortem inspection'</i>	There is immediate notification of suspect notifiable diseases to the State Veterinary Service	H			
						Relevant authorities are notified promptly of poor welfare prior to arrival to allow investigation and action to be taken	M			
						Sampling	Routine residues	L	Unsatisfactory residues of veterinary medicines or banned substances are detected	L
									Survey work	
							Suspect carcasses	H	Unsatisfactory residues of veterinary medicines or banned substances are detected	L
									Signs of notifiable disease are identified	M
				H	Meat exhibiting abnormalities is rejected	M				
		BSE	H	Animals requiring BSE/TSE testing are identified and tested	H					
				Control sampled carcasses	H	<i>As for 'Sampling'</i>				
						Meat from animals tested for BSE/TSE does not enter the food chain unless tested negative				
		Inspection of imported carcasses		L	Imported carcasses meet UK requirements for the removal of SRM	L				

Table 6 (cont.)

MHS TASK PRIORITISATION

STAGE	TASKS		DETAIL	Task Priority	RELATED OUTCOMES	Outcome Priority
Post-slaughter (cont.)	Other Duties	Marking of carcasses	Health mark	L	There is appropriate health marking of animal products fit for human consumption	L
			Personal stamp		Meat entering the food chain is free from SRM	H
			YL stamp		Meat entering the food chain is free from SRM	H
			Identifier stamp		Imported carcasses meet UK requirements for the removal of SRM	L
		Collection and communication of inspections data	L	There is on-going disease surveillance	L	
		Audit operator against third country controls	L	Plants maintain approval for export to third countries	L	
Certification						
By-Products Control	Audit Tasks	Audit operator's by-product controls	Audit operator controls	L	Animal by-products are accurately and reliably categorised	M
			Verification of waste categorisation and staining	M	Animal by-products are securely collected, stained where necessary, and dispatched to appropriate premises	M
		Deal with audit non-compliance	Minor	L	<i>As for 'Audit operator's by-product controls'</i>	M
			Major	M		
			Critical	H		

10. Current standards of performance

The MHS' customers will wish to see the priority attached to an outcome suitably reflected in the priority attached to the associated tasks that deliver the outcome. They will then wish to see that the tasks are performed to a standard that reflects that priority. The standard to which a task is performed demonstrates *in practice* the priority it is given.

Table 7 shows the MHS tasks, their priority and the current standards of performance of each task. These standards represent the requirements of current legislation and current customer SLAs. They will need to be adapted in light of the forthcoming EU hygiene regulations which come into force in 2006.

A number of points can be highlighted:

- A great deal of MHS activity is involved in verification of operator activity; this is in addition to the regular audit of an operator's controls and procedures.
- Under the requirements of the new EU hygiene regulations a greater emphasis is placed on the operator's responsibilities. The correct audit frequency and the level of verification will need to be re-considered in light of these new regulations
- The current standards of performance also highlight a number of considerations when set against the priority attached to tasks:
 - 100% supervision of the operator's disease control procedures represents a very high standard of performance for a low priority task, but the task is carried out during ante-mortem inspection
 - 100% ante-mortem inspection is a high standard of performance for a medium priority task. However, ante-mortem inspection is a legislative requirement
 - 100% post mortem inspection is a high standard of performance for a medium priority task; 100% inspection of green offal is particularly high, as this sub-task is only low priority. Post-mortem inspection is however a legislative requirement
 - 100% dentition checks on young sheep is a high standard for a medium priority task, although it is required to allow the YL stamp to be applied to carcasses
 - 100% inspection of imported carcasses is a very high standard for a task with low priority
 - The level of verification of waste categorisation and staining is a high standard of performance for a medium priority task
 - In other areas standards look appropriate to the priority of tasks.

11. Next Steps

The Board is invited to agree the specification of outcomes required of the MHS. The Board is also invited to agree the proposed priorities for both outcomes and the tasks undertaken by the MHS.

The agreed priorities will then be captured into SLAs. The FSA and Defra will co-ordinate their production of SLAs to ensure that an integrated and coherent set of SLAs is developed.

Within the MHS, the Operations Manual will be updated in light of the revised SLAs. The agreed priorities, and the reasoning behind them, will also be used to educate and inform staff.

Over the coming year standards of performance will be reviewed in light of the new EU Hygiene Regulations and any TSE risk management changes. In particular, given the greater emphasis on operator responsibility, the level of verification of operator activity undertaken by the MHS will be reviewed. Any changes would be incorporated into SLAs produced in Autumn '06.

Table 7

MHS STANDARDS OF PERFORMANCE

STAGE	TASKS	DETAIL	Task Priority	STANDARD OF PERFORMANCE		
Pre-slaughter	Audit Tasks	Audit operator's controls of incoming animals	Audit operator controls Food chain information ID CLP Health Welfare	L	Monthly audit reports (full throughput plants), quarterly audit reports (low throughput plants)	
			Verify passports, food chain information and ID validity	H	Verify 100% of passports Verify 100% of cattle and horse ID, sheep where tested Verify 100% of food chain information	
		Audit operator's disease control procedures	Audit operator's controls	L	Audit frequency based on risk assessment	
			Verification of controls	L	100% supervision of control of animals going to slaughter	
		Deal with audit non-compliance	Minor	L		
			Major	M		
			Critical	H		
		Inspection Tasks	Ante-mortem inspection	Health inspection	M	100% inspection red meat. Random daily inspection for poultry
				Welfare inspection		100% inspection for red meat and poultry
	CLP verification			100% inspection for cattle and sheep		
	Deal with ante-mortem exceptions		Examine and make diagnosis	H	Deal with 100% of exceptions Notification at time of discovery of exotic notifiable diseases Same day notification of other notifiable diseases	
			Accept, accept with conditions or reject for slaughter			
			Select for testing			
			Relieve suffering			
	Select animals for routine testing		Notify relevant authorities / others where required	L	95% of fresh and poultry meat samples requested and 85% of game meat samples requested with 95% of collected samples suitable for testing; 6% of older sheep; 100% of goats in participating plants	
	Inspect lairage operation	Hygiene	L	Random check, reported monthly		
		Welfare (WASK)		At least once a day		
Vehicle C&D		M	Check 25% of all vehicles			
Slaughter	Audit Tasks	Audit operator's compliance with WASK	Audit operator's procedures	L	Welfare Assessment System (WAS) reporting monthly (full throughput) and quarterly (low throughput)	
			Observe stunning and slaughter	H	At least once a day	
	Audit operator's hygiene controls	Audit operator's procedures	L	Hygiene Assessment System (HAS) reporting monthly (full throughput) and quarterly (low throughput)		
	Audit SRM controls at slaughter	Audit operator's controls	L	Random throughout the day		
		Verify SRM controls	H			
	Deal with audit non-compliance	Minor	L			
		Major	M			
Critical		H				
Other Duties	License slaughterers		M	As required		

Table 7 (cont.)

MHS STANDARDS OF PERFORMANCE

STAGE	TASKS		DETAIL	Task Priority	STANDARD OF PERFORMANCE
Post-slaughter	Audit Tasks	Audit operator's hygiene controls	HACCP	L	Weekly CCP check, with monthly report
			GHP		Monthly check and report
		Audit operator's SRM controls post slaughter	Audit operator's controls	L	Monthly report
			Verify SRM controls	H	100% inspection of controls
			Dentition checks (cattle)	H	100% of cattle
		Deal with audit non-compliance	Minor	L	
			Major	M	
			Critical	H	
		Inspection Tasks	Post-mortem inspection	Carcase	M
	Red offal			M	100% inspection
	Green offal			L	100% inspection, except poultry if not presented
	Inspect removal of SRM			H	100% inspection of carcasses
	Deal with meat found 'unfit' at inspection		Examine and make diagnosis	H	Deal with 100% of exceptions
			Detain and re-inspect		
			Reject		
			Additional examinations		
			Seizure and condemnation		
	Notify relevant authorities/ others where required				Notification at time of discovery of exotic notifiable diseases
					Same day notification of other notifiable diseases
	Dentition checks		Sheep	M	100% of young sheep to which YL stamp is to be applied. All sheep that are to be TSE tested
			Cattle	H	100% other than small calves
	Sampling		Routine residues	L	95% of all RIM forms
			Survey work		As requested
			Suspect carcasses	H	100% of suspect animals
			BSE/TSE	H	100% of all cattle that require testing for BSE; 100% of goats slaughtered in participating plants; 6% of sheep, as selected in the lairage
	Control sampled carcasses		Release	H	100% of carcasses testing negative
			Detain and re-inspect		100% as required
Declare unfit			100% deemed unfit		
Inspection of imported carcasses			L	100% of beef carcasses to wholesale cuts	

Table 7 (cont.)

MHS STANDARDS OF PERFORMANCE

STAGE	TASKS	DETAIL	Task Priority	STANDARD OF PERFORMANCE	
Post-slaughter (cont.)	Other Duties	Marking of carcasses	Health mark	L	100% of fit carcasses and meat
			Personal stamp		100% beef and overage split sheep carcasses
			YL stamp		100% of sheep with no teeth presented as YL
			Identifier stamp		If required to mark inspected imported beef carcasses
	Collection and communication of inspections data	L	All ante-mortem results (not held centrally), all post-mortem results (held centrally). Rejected meat information provided to operators		
	Audit operator against third country controls	L	As required by third country. USDA – monthly supervisory audit of controls		
Certification	As required by the operator				
By-Products Control	Audit Tasks	Audit operator's by-product controls	Audit operator controls	L	Checks of operator records monthly.
			Verification of waste categorisation and staining	M	Verify SRM waste every 30 minutes, other animal by-products at least daily. Check 100% of staining.
		Deal with audit non-compliance	Minor	L	
			Major	M	
Critical	H				

Appendix 1 - Membership of the Project Group

Jane Downes – Veterinary Director, MHS

Peter Hewson – Deputy Veterinary Director, FSA

Peter Jones – External consultant

Eddie Routledge – Deputy Head, Animal Health and Welfare Strategy and Delivery Division, Defra

Richard Drummond – Veterinary Consultant, Animal Health and Welfare DG, Defra

Appendix 2 - Basis for Priorities Attached to MHS Outcomes

This Appendix sets out the reasoning behind the priorities attached to the MHS outcomes.

1. Only properly identified animals are accepted for slaughter

Risk arises from inability to trace animals, particularly those with notifiable disease, back to source for further investigation/action. Available MHS evidence suggests that animals not being properly identified is a low level problem. The combination of low frequency of problem, but significant impact if animals cannot be traced to their origin suggests a MEDIUM risk based priority.

Risk based priority: MEDIUM

2. Only healthy animals are slaughtered for human consumption

Visible health is not a good indicator of whether animals are carrying organisms that commonly cause disease in humans. Diseases transmissible to humans through meat are rarely detected at ante-mortem inspection. This suggests that the outcome provides ongoing assurance of good practice, and is LOW priority.

Risk based priority: LOW

3. Unsatisfactory residues of veterinary medicines or banned substances are detected

45 out of 18163 red meat samples tested positive in 2004 (0.24%)

46 out of 6535 poultry meat samples tested positive in 2004 (0.70%)

12 suspect animals were sampled in 2004 – all tested negative. 4 suspect animals tested in 2005 to date, 3 have tested positive.

No public health problems are being reported due to residues of veterinary medicines or banned substances. The low level of incidence and low impact suggest the level of risk is limited. The outcome provides ongoing assurance of effective control in this area. This suggests that the outcome is LOW priority.

It should be noted that carcasses sampled for surveillance purposes are allowed to proceed without sample results, while suspect carcasses are retained when sampled.

Risk based priority: LOW

4. Meat exhibiting abnormalities is rejected at post mortem inspection

The levels of carcasses condemned at post-mortem inspection are low (e.g. 0.07% for cattle, 0.12% for sheep, 0.27% for poultry, 0.35% for pigs). The highest rates of rejection are for small game (1.35%), and calves (1.08%).

Post mortem inspection also has low sensitivity to identifying public health threats. The vast majority of abnormalities found at post-mortem inspection are not signs of zoonotic disease. Exceptions are tuberculosis, cysticercosis and *S. enteritidis*. However, tuberculosis is not readily transmissible through meat, cysticercosis is not a serious condition in man and *S. enteritidis* is virtually absent in large scale broiler production. This suggests that rejecting meat exhibiting abnormalities at post mortem inspection provides a low level of contribution to the management of foodborne illness, and that a risk based prioritisation is LOW.

Risk based priority: LOW

It is, however, a legislative requirement to ensure that meat is not only safe for human consumption, but also 'fit' or otherwise suitable for consumption. This is effectively achieved through post mortem inspection and the rejection of abnormalities.

Most contamination of carcasses by pathogens is not visible. However, detection of visible contamination at post-mortem inspection contributes to the ongoing audit of the operator's controls at skinning and evisceration.

These additional factors suggests that the priority attached to post mortem inspection should be increased to MEDIUM.

Adjusted priority: Medium

5. Only clean animals are slaughtered for human consumption

It is estimated that 1.7million cases of foodborne illness occur in England and Wales each year. It is further estimated that poultry meat is responsible for 29% and red meat 17% of these cases. Bacteria which are found on the coat or in the gut of normal animals are responsible for many of these cases. (Campylobacter – 337,655 cases and 80 deaths; E coli 0157 – 1026 cases and 23 deaths; Salmonella – 73,193 cases and 209 deaths). Minimising contamination of meat from the coat and gut is therefore an important control in limiting the transfer of pathogens to meat. 105 sheep and 76 cattle were rejected for slaughter under ‘clean livestock’ requirements. The frequency of animals being rejected is therefore very low. However the impact of the contamination of meat from the coat represents a real threat that may cause illness. It should be noted, however, that there are other control points that would also need to fail for any threat to be realised, especially proper cooking. This outcome acts in support of the management of a real potential threat. This suggests the outcome is MEDIUM priority

Risk based priority: MEDIUM

6. Animals are stunned and bled with minimal contamination

Carcasses are still protected by the skin with low risk of contamination of meat occurring from stunning or bleeding procedures.

Risk based priority: LOW

7. Carcasses are skinned, dehaired or plucked with minimal contamination

It is estimated that 1.7million cases of foodborne illness occur in England and Wales each year. It is further estimated that poultry meat is responsible for 29% and red meat 17% of these cases. Bacteria which are found on the coat or in the gut of normal animals are responsible for many of these cases. (Campylobacter – 337,655 cases and 80 deaths; E coli 0157 – 1026 cases and 23 deaths; Salmonella – 73,193 cases and 209 deaths).

Surveys have found that 23% of pigs carry salmonella and 87.1% carry C jejuni/coli; 4.7% of cattle carry E coli 0157 and 7.9% carry C jejuni/coli; 15.8% of sheep carry c jejuni/coli.

Therefore minimising contamination of meat from the coat and gut is an important control in limiting the transfer of pathogens to meat. It should be noted however, that other control points would also need to fail for any threat to be realised, especially proper cooking.

This outcome acts in support of the management of a real potential threat. This suggests the outcome is MEDIUM priority

Risk based priority: MEDIUM

8. Carcasses are eviscerated with minimal contamination

It is estimated that 1.7million cases of foodborne illness occur in England and Wales each year. It is further estimated that poultry meat is responsible for 29% and red meat 17% of these cases. Bacteria which are found on the coat or in the gut of normal animals are responsible for many of these cases. (Campylobacter – 337,655 cases and 80 deaths; E coli 0157 – 1026 cases and 23 deaths; Salmonella – 73,193 cases and 209 deaths).

Surveys have found that 23% of pigs carry salmonella and 87.1% carry C jejuni/coli; 4.7% of cattle carry E coli 0157 and 7.9% carry C jejuni/coli; 15.8% of sheep carry c jejuni/coli.

Therefore minimising contamination of meat from the coat and gut is an important control in limiting the transfer of pathogens to meat. It should be noted however, that other control points would also need to fail for any threat to be realised, especially proper cooking.

This outcome acts in support of the management of a real potential threat. This suggests the outcome is MEDIUM priority

Risk based priority: MEDIUM

9. Cross-contamination of meat is minimised during inspection, further handling, storing, cutting and processing

It is important that good hygienic practice is followed. This outcome provides ongoing assurance that such good hygienic practice is in place.

Risk based priority: LOW

10. Meat entering the food chain is free from SRM

In 2004 the MHS detected 13 cases in cattle where removal of SRM had not occurred satisfactorily and 18 cases in sheep and goats. The frequency of non-removal is therefore very low. It should be noted, however, that this low frequency occurs under a regime when operators know that every carcass will be inspected.

1 gm of spinal cord from a **clinically infected** animal entering the food chain would represent 50 bovine oral ID50 units, trebling the risk of exposure. It is, however, estimated that no more than 1 out of the 2 million UTM animals slaughtered each year would be infected and within 12 months of developing clinical signs of BSE. The likelihood of the SRM failure occurring in the 1 infected animal is thus extremely low. In addition, the infective dose for humans is thought to be considerably higher than that for bovines. The actual level of risk is therefore low.

If the OTM rule were removed, it is estimated that there could be about 80 infected animals within one year of onset out of an extra 500,000 that would enter the food chain each year, and the risk based priority would move to medium. (See Ferguson, NM, C A Donnelly, 2003, Assessment of Risk Posed by Bovine Spongiform Encephalopathy in Cattle in Great Britain and the Impact of Potential Changes to Current Control Measures, Proceedings of the Royal Society of London Series B-Biological Sciences, v270)

Risk based priority: LOW

The removal of SRM provides a very strong control point, removing over 99% of infectivity, and therefore help to minimise the impact of any failures in other BSE/TSE related controls. Public concern about BSE continues to run at a high level, and the elimination of BSE by 2010 is a key Defra target

This combination of factors suggest the priority of this outcome is raised to HIGH priority

Adjusted priority: HIGH

11. Animals requiring testing for BSE/TSE are identified and tested

Currently all over 24 month bovines exhibiting abnormalities are required to be tested. In addition, the only OTM animals permitted into the feed chain after testing are BAS cattle between 30 and 42 months.

If OTM animals were allowed back into the food chain, it is estimated that 80 animals within 12 months of developing clinical signs would be slaughtered for human consumption. If these were not tested they would still have their SRM removed, including the vertebral column, and the risk to public health would be low.

A 10% failure of testing would only increase the current low risk by 20%

Risk based priority: LOW

The current consideration being given to replacing the OTM rule with BSE testing relies on confidence that testing procedures are robust. The need to maintain that confidence suggests that the testing of OTM animals be given HIGH priority. The public expenditure cost of retaining the OTM system is estimated at £1m per day.

Adjusted priority: HIGH

12. Meat from all animals tested for BSE/TSE does not enter the food chain unless tested negative

An animal that tests positive for BSE/TSE represents a threat to human health. A test positive animal entering the food chain, with its SRM including the vertebral column having been removed, would however only contain about 20 bovine oral ID 50 units. (See Comer P, P J Huntly, 2004, Exposure of the human population to BSE infectivity over the course of the BSE epidemic in Great Britain and the impact of changes to the Over Thirty Month Rule, Journal of Risk Research v7)

Risk based priority: MEDIUM

The current consideration being given to replacing the OTM rule with BSE testing relies on confidence that testing procedures are robust. The need to maintain that confidence suggests that the testing of OTM animals be given HIGH priority. The public expenditure cost of retaining the OTM rule is estimated at £1m per day.

Adjusted priority: HIGH

13. Meat from over-age cattle does not enter the food chain

There have been 18 cases identified of over-age cattle entering the food chain since checks began in September 2004, with the number diminishing over time. The majority of these cases involve animals over age by a few days.

It is estimated that about 80 OTM animals within 12 months of developing clinical signs would enter the food chain if there were no controls. Assuming that SRM, except the vertebral column, would be removed, potential exposure from 1 animal would be about 30 bovine oral ID50. However, the chance of an infected animal being one of the very small number that got through to the food chain unchecked is very low probability.

Risk based priority: LOW

The current consideration being given to replacing the OTM rule with BSE testing relies on confidence that testing and exclusion procedures are robust. The need to maintain that confidence suggests that this outcome be given HIGH priority.

Adjusted priority: HIGH

14. Imported carcasses meet UK requirements for the removal of SRM

BSE incidence in most countries from which we import beef is significantly lower than it has been in the UK. The exporting country's authorities will have monitored SRM removal. The MHS undertakes on-going surveillance to ensure that proper procedures are being undertaken. Any spinal cord fragments present despite that monitoring will be prevented from entering the food chain as the vertebral column has to be removed from imported carcasses of cattle over 12 months.

This outcome therefore represents on-going assurance that proper procedures are in place

The number of cases of non-compliance has dropped significantly. In 03/04 10 occasions of non-compliance a month were reported. By 04/05 only 4 were reported in the period May-July, 1 incident in November, 1 in February, with no non-compliance since February.

Risk based priority: LOW

15. There is appropriate health marking of animal products fit for human consumption

This outcome provides on-going assurance to retailers and consumers beyond the slaughterhouse that proper procedures have been followed in the production of meat

Risk based priority: LOW

16. Animal by-products are accurately and reliably categorised

The consumption of animal by products by humans represents a potential threat due to the fact that:

- It may not have been handled hygienically
- It will contain abnormal meat
- It may contain material such as SRM

There is also a potential threat to human health from technical products derived from animal by-products if the by-products are not accurately and reliably categorised.

Overall the risks to animal health are mitigated by ante/post-mortem inspection. TSE risks to livestock are addressed by the ban on feeding processed animal protein to farmed animals. However category 3 animal by-products are used in petfood and must be accurately categorised to protect the health of pet animals.

There are no public health problems being reported due to the consumption of animal by-products. Nonetheless such consumption could present a potential threat to health and the outcome is therefore MEDIUM priority

Risk based priority: MEDIUM

17. Animal by-products are securely collected, stored where necessary, and dispatched to appropriate premises

The consumption of animal by products by humans represents a potential threat due to the fact that:

- It may not have been handled hygienically
- It will contain abnormal meat
- It may contain material such as SRM

Failure to consign material without undue delay could allow pathogens to spread and contaminate food grade material.

There are no public health problems being reported due to the consumption of animal by-products.

Nonetheless such consumption could present a potential threat to health and the outcome is therefore MEDIUM priority

Risk based priority: MEDIUM

18. Signs of notifiable disease in animals are identified

Many of the outbreaks of exotic animal disease have been first identified in slaughterhouses. The slaughterhouse therefore provides an important control point in the containment of notifiable diseases. Unless there is an already identified outbreak of a notifiable disease this outcome aims to manage potential threats and as such is MEDIUM priority. Under conditions where an outbreak has already been identified this outcome would then take on high priority as the threat would be immediate and specific.

Risk based priority: MEDIUM

19. Signs of notifiable disease in carcasses are identified

Many of the outbreaks of exotic animal disease have been first identified in slaughterhouses.. The slaughterhouse therefore provides an important control point in the containment of notifiable diseases. Unless there is an already identified outbreak of a notifiable disease this outcome aims to manage potential threats and as such is MEDIUM priority. Under conditions where an outbreak has already been identified this outcome would then take on high priority as the threat would be immediate and specific.

Risk based priority: MEDIUM

20. There is immediate notification of suspect notifiable diseases to State Veterinary Service

If an exotic suspect notifiable disease has been identified there is an immediate and specific threat. This outcome therefore has HIGH priority.

Risk based priority: HIGH

21. On suspect notifiable disease cases, instructions from the State Veterinary Service are followed promptly

If a suspect notifiable disease has been identified there is an immediate and specific threat. The initial response is vital in containing the disease. MHS officials need to act until SVS personnel can attend. This outcome therefore has HIGH priority.

Risk based priority: HIGH

22. Conditions of holding livestock minimise spread of disease

There is a low level of risk of cross contamination from infected animals. This outcome provides ongoing assurance of operator good practice.

Legislative restrictions on the time animals can be held prior to slaughter limit the risk of infections being acquired in the lairage and any infected animals becoming infective.

Risk based priority: LOW

23. Time to slaughter minimises risk of spread of disease

There is a low level of risk of cross contamination from infected animals. This outcome provides ongoing assurance of operator good practice.

Legislative restrictions on the time animals can be held prior to slaughter limit the risk of infections being acquired in the lairage and any infected animals becoming infective

Risk based priority: LOW

24. Micro-organisms do not remain on animal transport vehicles or crates

The two reports of the 2001 FMD Inquiries and the government's response identify biosecurity as a key element of disease control. Contaminated lorries were identified with some spread of disease ("Descriptive Epidemiology of the 2001 FMD Epidemic in GB: The First Five Months).

During FMD 2001 the Government introduced Restricted Infected Areas with enhanced biosecurity arrangements, including vehicles, and would do so again in the event of another outbreak. Cleansing and disinfection of poultry crates is also considered a major element of the *Campylobacter* control strategy.

This outcome helps manage the potential threat of disease spread and is therefore MEDIUM priority

Risk based priority: MEDIUM

25. There is on-going disease surveillance

It is important that developing patterns are identified to help manage and control disease. UK disease free status is also dependent in some cases (e.g. Aujeszky disease) on satisfactory sampling being undertaken.

This outcome provides on-going monitoring and is therefore LOW priority.

Risk based priority: LOW

26. There is effective identification of visible signs of abuse or neglect on live animals and on carcasses.

In 2004, in a total of 22842 reports, there were 87 occasions in which the MHS reported welfare score in category D/4 (unnecessary pain or distress) and 188 in category C/3 (non compliance with welfare standards) relating to transportation and cases of poor welfare prior to arrival.

The frequency of non-compliance with welfare standards is low, and in general it is healthy animals, properly managed that are presented to the slaughterhouse. However abattoir checks are efficient as they allow for surveillance of animals from a large percentage of GB farms. The Farm Animal Welfare Council points out that "unloading is the first point where....enforcement officers can make an assessment of the health and well being of the animals. The condition of animals on arrival may give an indication of both the standard of transport and of the husbandry on the farm of origin. These assessments are.....important in terms of animal welfare".

The outcome is therefore important in managing potential animal welfare threats and is therefore MEDIUM priority.

Risk based priority: MEDIUM

27. Prompt action is taken to relieve suffering where this is required

If suffering has been identified then there is clearly an immediate and specific threat to animal welfare. This outcome is therefore HIGH priority.

Risk based priority: HIGH

28. Relevant authorities are notified promptly of poor welfare prior to arrival to allow investigation and action to be taken

If poor welfare has been identified on arrival it is important to check further down the production chain to assess whether a more general problem exists. As the existence of wider issues will be unknown, this outcome helps manage a potential threat, and is thus MEDIUM priority

Risk based priority: MEDIUM

29. Lairage conditions and animal handling promote good animal welfare

In 2004, in a total of 22842 reports there were 34 occasions in which the MHS reported welfare score in category D/4 (unnecessary pain or distress) and 326 in category C/3 (non compliance with welfare standards) relating to lairage and handling.

Given the low frequency of non-compliance, this outcome is concerned with on-going assurance of good operator procedures, and is thus LOW priority.

Risk based priority: LOW

30. Slaughter procedures meet agreed welfare standards

In 2004, in a total of 22842 reports there were 14 occasions in which the MHS reported welfare score in category D/4 (unnecessary pain or distress) and 138 in category C/3 (non compliance with welfare standards) relating to stunning and slaughter.

Given the low frequency of non-compliance, this outcome is concerned with on-going assurance of good operator procedures, and is thus LOW priority.

Risk based priority: LOW

31. Slaughter is undertaken by competent and appropriately trained operatives

Slaughter by untrained and incompetent operatives would represent a significant potential threat to the welfare of animals. The MHS licensing arrangements are specifically designed to help manage that threat.

As this outcome is concerned with the management of a significant potential threat it is MEDIUM priority.

Risk based priority: MEDIUM

32. Prompt action is taken where unacceptable slaughter procedures are identified

If an unacceptable procedure has been identified then an immediate and specific threat to animal welfare exists. This outcome is therefore HIGH priority.

Risk based priority: HIGH

33. Plants maintain approval for export to third countries

This outcome provides ongoing assurance of a plant's approval to export to third countries. The value of meat exports in 2004 was £663.8m.

Risk based priority: LOW

34. Products of animal origin are eligible for export

This outcome provides ongoing assurance of products eligibility for export. The value of meat exports in 2004 was £663.8m.

Risk based priority: LOW