

# ANTE MORTEM INSPECTION IN RESPECT OF NEW HYGIENE LEGISLATION

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## SUMMARY

*Inspection of the live animal prior to slaughter is an important step in the production of wholesome meat for human consumption. Only in the live animal can abnormalities of posture, movement and behaviour be detected. Ante-mortem inspection can improve the efficiency of the operation by screening out a number of animals that would be unfit for consumption. The responsibility lies primarily with the relevant public health authorities that are represented by veterinarians and meat inspectors at the abattoir stage. The primary aim in all inspections throughout the meat processing operation is the protection of the consumer from zoonotic or meat borne disease. Ante mortem inspection also increases the protection of slaughter personnel from disease, these people being the first in the chain to have direct contact with the animal and its products. A further aim is to protect animal health.*

## PURPOSE OF ANTE MORTEM (AM) INSPECTION

Purpose of ante mortem (AM) inspection is to determine whether welfare has been compromised or if there is any sign of any condition that might adversely affect human or animal health, paying particular attention to zoonotic and notifiable diseases. Overall responsibility of AM inspection rests with the Official Veterinarian (OV). The OV must take account of available Food Chain Information (FCI) when conducting the AM inspection. The Official Auxiliary (OA) is allowed to assist the OV with many of the pre-slaughter tasks. In relation to AM inspection and welfare checks, they can make an initial check and help with purely practical tasks. The OA must alert the OV to abnormal animals identified before slaughter.

Inspection and verification can be carried out by:

- Observing animals at unloading (random): by OV/OA

- Initial checks: by OV assisted by OA
- AM inspection: by OV assisted by OA
- Completion of ante mortem record: by OV/OA
- Completion of pen cards: by OV/OA
- Enforcement: by OV

## AM INSPECTION PROCEDURES AT SLAUGHTERHOUSE

Ante-mortem inspection should ideally be carried out at the time of the animals' arrival at the slaughterhouse. AM inspection for domestic ungulates involves observing the animals, either:

- In motion (possibly when they are being unloaded), and/or
- Interacting with each other in a group.

It may also include observing of animals at rest once settled in their pens. There is no need to see routinely all animals from sides, front and back, during the initial check or routine AM inspection.

AM inspection of poultry and lagomorphs consists of a flock inspection (854/2004, Annex I, Section IV, Chapter V, Paragraph 6; 854/2004, Annex I, Section IV, Chapter VI).

The OV must be satisfied that extent of the observation is sufficient to allow the objectives of AM inspection to be met. Two important variables must be taken into consideration by the OV when performing ante mortem inspection:

1. Every slaughterhouse/layout/lair is different.
2. There are marked differences between the species, age, category and number of animals being inspected.

To be able to carry out satisfactory ante mortem inspections, clinical inspections and detailed examinations, the OV must have available the following facilities and equipment (853/2004, Annex III, Sec-

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tion I, Chapter IV, Paragraph 5):

- Adequate lighting: in previous legislation was established adequate lighting in working areas of 220 lx and on the place of inspection 540 lx. Definitively, according to new rules it is decision of OV to organize his job to be able to recognize any change in healthy status of animals.

- Adequate space: definition is to avoid possibility of contamination in case of sick animals. The isolation pens must be presented and also capacity of slaughtering must be respected.

- Adequate access: OV must be able to see all animals except poultry and lagomorphs (flock inspection)

- Adequate separate facilities for detailed examination (a crush or equivalent is desirable but not legally required)

- Staffing assistance: Food Business Operator (FBO) of slaughterhouse must organize a staff assistance if it is required by OV

- Sufficient time

- Proper equipment e.g. thermometer and stethoscope

The inspection must take place within 24 hours of animals' arrival at the slaughterhouse and less than 24 hours before slaughter. In some cases, AM inspection may need to be repeated. The OV may require AM inspection at any other time (854/2004, Annex I, Section I, Chapter II, B, Paragraph 1). Routine AM inspection may begin with an initial check done by the OA or OV. This may be done at unloading or in the pens. The OA must alert the OV to any abnormal animal if identified. All animals must receive AM inspection by the OV, even if the initial check by the OA has not revealed anything unusual. The initial check, if undertaken by the OV, may suffice as to constitute an adequate ante mortem inspection. In addition to routine ante mortem inspection, the OV is required to carry out a clinical inspection of all animals that do not appear to be "normal" and those that the FBO or an OA may have put aside. Clinical inspection does not necessarily require the OV to undertake a clinical examination (854/2004, Annex I, Section I, Chapter II, B, Paragraph 3).

Animals suspected of having a disease or condition that may adversely affect human or animal health should undergo detailed ante mortem examination.

Each OV should make a professional judgement, based on the FCI or other information and abnormalities observed, as to which animals should be further examined. Such an examination may include taking of appropriate samples. All animals suspected of having their welfare compromised should be subjected to further clinical inspection/examination/sampling/ evidence taking as the OV professionally judges to be necessary (854/2004, Annex I, Section II, Chapter III, Paragraph 5).

The FBO must make the FCI available to the OV without delay. The OV should use their professional judgement and take into account the information provided when performing AM inspection and Post Mortem (PM) inspection (853/2004, Annex II, Section III, Paragraph 5). If an animal is in pain or distress, delay of slaughter for carrying out AM inspection would cause further suffering, so the FBO must slaughter it immediately without AM inspection and the carcass must be disposed of as an animal by-product. The OV has a duty to keep records of AM inspection (854/2004, Annex I, Section II, Chapter 1, Paragraph 1).

There is no need for the OV to be present at the time of AM inspection in the slaughterhouse in the following cases (854/2004, Annex I, Section III, Chapter II, Paragraph 2):

- An OV or Approved Veterinarian (AV) has carried out AM inspection at the farm and checked the food chain information (FCI),

- The details of the FCI have been communicated to the OA,

- The OV is satisfied that the FCI does not point to any possible problem for food safety and the animals' general state of health and welfare is satisfactory,

- The OV regularly verifies that the OA is carrying out such checks properly.

When AM inspection is performed on the farm (in case of swine, poultry, farmed lagomorphs, farmed game), then AM inspection at the slaughterhouse covers only (854/2004, Annex I, Section IV, Chapter IV, Paragraph 4; 854/2004, Annex I, Section IV, Chapter V, Paragraph 4; 854/2004, Annex I, Section IV, Chapter VI; 854/2004, Annex I, Section IV, Chapter VII, Paragraph 3):

- Control of the animals' identification and

- Screening to ascertain whether animal welfare

rules have been complied with and whether signs of any condition that might adversely affect human or animal health are present. An OA may carry out this screening (not specified in case of farmed game).

The OV is to impose the conditions, already determined by competent authority, for slaughtering animals under schemes for the control of a specific disease, such as brucellosis or tuberculosis, or zoonotic agents such as salmonella (854/2004, Annex I, Section II, Chapter III, Paragraph 7).

Animals can be moved from their lair to slaughterhouse only if the OV is satisfied that an effective positive release system is in operation to ensure that every animal that requires AM inspection receives it when required and that they are only slaughtered for human consumption when AM inspection has been carried out. Animals cannot be moved to slaughterhouse to be slaughtered for human consumption until the AM inspection has been completed, recorded and signed by the OV and any conditions for suspect animals have been met.

### ON FARM AM INSPECTION

There is a new point in legislation, possibility of on farm AM inspection. The on farm AM inspection of pigs, poultry and lagomorphs must comprise:

1) Checks on records or documentation at the holding, including food chain information (FCI);

2) The examination of the animals to determine whether:

(i) They have a disease or condition, which may be transmitted to animals or humans through handling or eating the meat, or are behaving, individually or collectively, in a manner indicating that such a disease may occur,

(ii) They show disturbance of general behaviour or signs of disease, which may make the meat unfit for human consumption,

(iii) There is evidence or reasons to suspect that they may contain chemical residues in excess of the levels laid down in the Community legislation, or residues of forbidden substances.

When the animals are not slaughtered within 3 days of the issue of the health certificate:

(a) If they have not left the holding of provenance for the slaughterhouse, they are to be re-examined and a new health certificate issued

(b) If the animals are already en route for or at the slaughterhouse, slaughter may be authorised once the reason for the delay has been assessed, provided that the animals undergo a further veterinary ante-mortem inspection (854/2004, Annex I, Section IV, Chapter IV, A; 854/2004, Annex I, Section IV, Chapter V, A; 854/2004, Annex I, Section IV, Chapter VI).

For poultry reared for the production of 'foie gras' and delayed eviscerated poultry slaughtered at the holding of provenance, the same rules as mentioned previously in the case of poultry are applied to AM inspection. Special certificate is to accompany the non-eviscerated carcasses to the slaughterhouse or cutting plant (854/2004, Annex I, Section IV, Chapter V, A, Paragraph 8).

For farmed game, an OV or AV must carry out the AM inspection on the farm site. Health certificate must accompany live animals inspected on farms, another certificate must accompany animals inspected and slaughtered on farms. The AM inspection must comprise checks on records or documentation at the holding, including food chain information (FCI) When the AM inspection takes place more than 3 days before the arrival of animals to the slaughterhouse, the animals undergo a further veterinary ante-mortem inspection (854/2004, Annex I, Section IV, Chapter VII, A.).

### POSITIVE RELEASE AUTHORIZATION FOR SLAUGHTER

The OV must positively authorise the slaughter of animals once ante mortem inspection has been concluded with a satisfactory outcome. This can be done by OV signature on a pen card or other permanent record. The signature of OV in charge shows that the animals were found to be suitable for slaughter for human consumption without additional conditions. Some systems use a signed pen card (positive release pen card) or another signed AM inspection record acting as the means of communication between OV and FBO. Other systems involve the use of markers or indicators on the pens or on the animals as the signal to the operator. The system must be documented in details. Both the OV and the FOB must retain a copy of the document. The procedure must be readily available to assist OV. Plant operatives enter stock details and OV authorizes

slaughter by signing the positive release pen card. OA acting under the supervision and responsibility of OV can complete pen cards but not sign them. Retain completed pen cards / other signed records and use them to check that only animals that have been inspected AM are slaughtered.

This card is used to identify animals considered suspect but which are still suitable for slaughter. It must be completed to accompany the animal on transfer to an isolation pen. Each suspect animal must have its own separate suspect card for slaughter and must be kept apart from any animal, which is not sick or injured. The suspect animal card must be attached to a suitable position in the isolation pen while the animal awaits further examination by the OV or slaughter. The suspect animal card must be used by the OV to record the PM findings and must be retained for 12 months.

The OV/OA must complete details of the date and time of inspection and the OV puts his/her signature in the appropriate column. The 'Comments/Action' column must include (854/2004, Annex I, Section II, Chapter I, Paragraph 3) as follows:

- Details of any observed abnormalities.
- Arrival of emergency slaughter animals (AM signature will not be appropriate in case of emergency slaughter animals).
- Arrival of hunted wild game animals (AM signature will not be appropriate in case of hunted animals).
- Any welfare concerns, and action taken
- The requirement for TSE test in certain animals
- The requirement for TSE test in adult sheep and goats
- Details of animals dead on arrival or that died in their housing.

The results of inspections must be included in relevant databases. Animals arriving to a slaughterhouse for slaughter must usually be slaughtered there. In exceptional circumstances the OV may recommend direct movements to another slaughterhouse (854/2004, Annex I, Section II, Chapter III, Paragraph 8).

### AM INSPECTION FOR SUSPECT LIVE ANIMALS

Suspect animals should be subjected to detailed ante mortem examination in order, for the OV, to

make a decision whether the animal is fit for slaughter for human consumption. The OV must defer the slaughter of animals suspect of having a disease or condition that may adversely affect human or animal health. The FBO should detain the animals in isolation for further observation pending the final decision of the OV (854/2004, Annex I, Section II, Chapter III, Paragraph 5). Examples when the OV might identify suspect animals are:

- Animals show clinical signs of a disease transmissible to men or animals. Example: animals are found or suspect to have any form of clinical tuberculosis.
- Animals show clinical signs of a disease or disorder likely to make fresh meat unfit for human consumption.
- Animals show signs of fatigue or stress. They must be allowed to rest for not less than 24 hours unless the OV has determined otherwise.
- There is evidence or suspicion that illegal or unauthorised substances in excess of maximum residue limits are present in the animal (854/2004, Annex 1, Section II, Chapter III, Paragraph 6).

If the animal is not considered fit for slaughter at the time of ante mortem, the OV may request that the animal be either treated while in isolation (the provision of care and veterinary treatment is the responsibility of the owner or person in charge of the animal), or slaughtered in situ and the carcass to be disposed of as an animal by-product (permission of the owner will be required unless the animal is in extremis, the plant FBO may not be the owner of the animal).

### OUTCOMES OF ANTE - MORTEM INSPECTION

For the isolated animals, a detailed inspection follows the initial separation. The animals could be judged into any one of the following categories that have been proposed in the Draft code of hygienic practice for meat (FAO/WHO, 2004):

- **Passed for slaughter** are animals that have been judged normal and so can proceed to slaughter without undue delay.
- **Passed for slaughter subject to a second ante-mortem inspection.** A second ante-mortem inspection should be carried out after an additional

holding period. Animals that would fall in this category include those that have been insufficiently rested, or are temporarily affected by a physiological or metabolic condition.

- **Passed for slaughter under special conditions.** Where the competent person undertaking ante-mortem inspection suspects that post-mortem inspection findings could result in partial or total condemnation, the animals are treated as "suspects". Their slaughter is deferred, preferably to the end of normal slaughter.

- **Condemned.** Animals could be condemned for public health reasons due to the presence of meat-borne hazards, occupational health hazards or the likelihood of unacceptable contamination of the slaughter and dressing environment following slaughter; meat suitability reasons; animal health reasons – animals in this category are treated as specified in the relevant national legislation, and disposed of accordingly.

- **Emergency slaughter.** This judgment is made when an animal eligible for being passed under special conditions could deteriorate, if there was a delay in slaughter.

## EMERGENCY SLAUGHTER OF ANIMALS

Meat from domestic ungulates that has undergone emergency slaughter outside the slaughterhouse may be used for human consumption only if it is from an otherwise healthy animal that has suffered an accident that prevented its transport to the slaughterhouse for welfare reasons (853/2004, Annex III, Section I, Chapter VI, Paragraph 1).

A veterinarian must carry out an AM inspection of the animal (853/2004, Annex III, Section I, Chapter VI, Paragraph 2). Removal of stomach, viscera, but no other dressing may take place on the spot under the supervision of the vet (853/2004, Annex III, Section I, Chapter VI, Paragraph 3). Following declarations must be included:

1. Declaration completed by the farmer stating the identity of the animal and any veterinary products or other treatments administered to the animal, dates of administration and withdrawal periods, must accompany the slaughtered animal to the slaughterhouse.

2. Declaration issued by the veterinarian recording

the favourable outcome of the AM inspection, date, time, reason and any treatment administered by vet must accompany the animal to the slaughterhouse (853/2004, Annex III, Section I, Chapter VI, Paragraphs 5,6).

The slaughtered and bled animal must be transported hygienically within 2 hours to the slaughterhouse if accompanying the animal to the slaughterhouse is permitted. Any viscera removed must accompany the slaughtered animal and be identified. If transportation takes more than 2 hours, the animal must be chilled. Exception is where climatic conditions so permit, chilling is not necessary (853/2004, Annex III, Section I, Chapter VI, Paragraphs 3,4).

Receiving of the animal at the slaughterhouse:

1. The FBO must ensure that meat from domestic ungulates that have undergone emergency slaughter may be used for human consumption only if complying with all the requirements concerning slaughtering outside the slaughterhouse (853/2004, Annex III, Section I, Chapter VI).

2. The OV must examine the declaration accompanying the body of the animal issued by the vet (854/2004, Annex I, Section I, B, Chapter II, Paragraph 4).

## SAŽETAK PREGLED ŽIVOTINJA PRIJE KLANJA U OKVIRU PROPISA EU

*Pregled životinja prije klanja važan je čimbenik za proizvodnju zdravstveno ispravnog mesa. Primarni cilj nadzora u svim fazama proizvodnje mesa jest zaštita potrošača od zoonoza i drugih bolesti. Pregledom životinja prije klanja također se zaštićuje i klaoničko osoblje koje je prvo u dodiru sa životinjama i njihovim proizvodima. Svrha pregleda prije klanja je utvrditi poštuju li se načela dobrobiti te utvrditi bilo kakve promjene i stanja koja ugrožavaju zdravlje ljudi ili životinja.*

*Pregled se mora obaviti unutar 24 sata po prispjeću životinja u klaonicu, te manje od 24 sata prije klanja. Kod istovara se obavlja rutinski pregled. Osim rutinskih pregleda, veterinarski inspektor dužan je obaviti detaljnu kliničku pretragu životinja sumnjivih na oboljenje/zaraženje, a pri prosuđivanju važni su i podaci o prehrambenom lancu. Ni jedna životinja ne smije napustiti stočni depo radi klanja prije nego li bude pregledana, a pregled dokumentiran. Legislativa EU omogućuje pregled životinja namijenjenih klanju (svinja, peradi, dvojezubaca) na farmi. U tom slučaju*

provjerava se dokumentacija s farmi, uključujući podatke o prehranbenom lancu, te pregledavaju životinje radi utvrđivanja bolesti ili stanja koje se mesom mogu prenositi na ljude, bolesti koje bi meso mogle učiniti zdravstveno neispravnim, te radi sumnje na nalaz biorezidua iznad najviših dopuštenih količina ili zabranjenih tvari.

Pregledom prije klanja životinje se svrstavaju u slijedeće skupine:

1. mogu se klati bez ikakvih odgađanja
2. mogu se klati nakon dodatnog pregleda, obično se radi o neodmorenim životinjama ili životinjama s privremenim fiziološkim ili metaboličkim poteškoćama
3. mogu se klati pod posebnim uvjetima – sumnjive životinje, odvojeno klanje, nakon klanja zdravih životinja

4. ne smiju se klati - zabrana - javno-zdravstveni razlozi

5. moraju se klati bez odgode - klanje iz nužde

## LITERATURE

**COMMISSION REGULATION (EC) No 853/2004** of the European Parliament and of the Council of 29 April 2004 laying down specific hygiene rules for food of animal origin

**COMMISSION REGULATION (EC) No 854/2004** of the European Parliament and of the Council of 29 April 2004 laying down specific rules for the organisation of official controls on products of animal origin intended for human consumption

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# DOBROBIT ŽIVOTINJA U PRIJEVOZU – PREMA PREPORUKAMA OIE I EU

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## SAŽETAK

U radu se govori o dobrobiti životinja tijekom prijevoza prema preporukama OIE i EU. Opisani su čimbenici koji utječu na količinu stresa i zdravstveno stanje životinja tijekom prijevoza, te izravno mijenjaju dobrobit životinja. To su: načini postupanja sa životinjama tijekom utovara, putovanja i istovara, obučenosť ljudi, plan putovanja, način prethodnog držanja životinja, genetika.

**Ključne riječi:** prijevoz, dobrobit, zdravstveno stanje, zakon

## UVOD

Veliki broj svih farmskih životinja u nekom dijelu svog života prevozi se, bilo na mjesta gdje je bolja i dostupnija hrana, nekad drugom vlasniku ili na drugačiji način držanja, a najčešće na klanje. Postupanje sa životinjama, ukrcaj, tijekom prijevoza i iskrca-

vanje bitno utječu na njihovu dobrobit.

Dobrobit jedinke jest njeno stanje u kojem se ona nosi sa svojim okolišem. Pojam dobrobiti je jako širok i uključuje fizičko i mentalno stanje životinja.

Još 1993. godine znanstvenici FAWC - a utvrdili su pet postulata dobrobiti životinja:

- osloboditi životinje od žeđi, gladi i pothranjenosti stalnim pristupom svježoj vodi i hrani,
- osloboditi životinje nelagode osiguravajući im adekvatan okoliš (smještaj),
- osloboditi životinje boli, ozljeda i bolesti prevencijom ili brzom dijagnozom i terapijom,
- omogućiti životinjama ispoljavanje normalnog, fiziološkog ponašanja osiguravajući dovoljno prostora u odgovarajućim objektima,
- osloboditi životinje straha i stresa osiguravajući uvjete bez mentalne patnje.

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