



Lecture title: Veterinary Inspection

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Summary:

Veterinary Inspection

A proper meat inspection consist :

- 1- examination of live animal (A/M)
- 2- examination of carcass and offal (P/M)
- 3- laboratory test (pathological, microbiological, chemical)

The objectives of meat inspection programme are twofold:

- a. To ensure that only apparently healthy, physiologically normal animals are slaughtered for human consumption and that abnormal animals are separated and dealt with accordingly.
- b. To ensure that meat from animals is free from disease, wholesome and of no risk to human health.

These objectives are achieved by ante mortem and postmortem inspection procedures and by hygienic dressing with minimum contamination. Whenever appropriate the Hazard Analysis Critical Control Point (HACCP) principles should be used: The inspection procedures should be appropriate to the spectrum and prevalence of diseases and defects present in the particular class of livestock being inspected using the principles of risk assessment.

Ante-mortem inspections aim is to screen out animals with manifest lesions or disease conditions for isolation slaughter. This will prevent, as far as possible, the spread of diseases among the live animals awaiting slaughter and avoid the infections carried by the sick animals from getting into the meat production process to contaminate the slaughter hall, plant, equipment, personnel, animal carcasses and parts.

Ante mortem Inspection

Some of the *major objectives* of ante mortem inspection are as follows:• to screen all animals destined to slaughter.



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- to ensure that animals are properly rested and that proper clinical information, which will assist in the disease diagnosis and judgment, is obtained.
 - to reduce contamination on the killing floor by separating the dirty animals and condemning the diseased animals if required by regulation.
 - to ensure that injured animals or those with pain and suffering receive emergency slaughter and that animals are treated humanely.
 - to identify reportable animal diseases to prevent killing floor contamination.
 - to identify sick animals and those treated with antibiotics, chemotherapeutic agents, insecticides and pesticides.
 - to require and ensure the cleaning and disinfection of trucks used to transport livestock.
- Both sides of an animal should be examined at rest and in motion. Ante mortem examination should be done within 24 hours of slaughter and repeated if slaughter has been delayed over a day.

Meat Inspection Procedures

- 1- Animal must be examined on the day of arrival to abattoir and repeated immediately before slaughter if animal held 24 h.
- 2- Animal should be inspected in lairage at rest and motion.
- 3- In case of sick animal ,poor condition animal (species, class, age,color, marking, condition of animal) must be recorded.
- 4- Special attention must be paid to casualty and emergency slaughter ,none of which escape from A.M.
- 5- General behavior of animal ,whether fatigued , level of nutrition ,cleanliness ,obvious signs of disease should be observed.
- 6- Female in oestrus ,aggressive animal, horned animal and polled stock should be isolated in addition to isolate the disease and suspected animal. Animals affected with extensive bruising or fractures require emergency slaughter. Animals showing clinical signs of disease should be held for veterinary examination and judgment. They are treated as “suspects” and should be segregated from the healthy animals. The disease and management history should be recorded and reported on an A/M inspection card. The animals affected with extensive bruising or fractures require emergency slaughter. Animals showing clinical signs of disease should be held for veterinary



examination and judgment. They are treated as “suspects” and should be segregated from the healthy animals. The disease and management history should be recorded and reported on an A/M inspection card. Other information should include:

1. Owner's name
2. The number of animals in the lot and arrival time
3. Species and sex of the animal
4. The time and date of ante mortem inspection
5. Clinical signs and body temperature if relevant
6. Reason why the animal was held
7. Signature of inspector

Ante mortem inspection should be carried out in adequate lighting where the animals can be observed both collectively and individually at rest and motion. The general behavior of animals should be observed, as well as their nutritional status, cleanliness, signs of diseases and abnormalities. Some of the abnormalities which are checked on ante mortem examination include:

1. Abnormalities in respiration
 2. Abnormalities in behavior
 3. Abnormalities in gait
 4. Abnormalities in posture
 5. Abnormalities in structure and conformation
 6. Abnormal discharges or protrusions from body openings
 7. Abnormal color
 8. Abnormal odour
- Abnormalities in respiration** commonly refer to frequency of respiration. If the breathing pattern is different from normal the animal should be segregated as a suspect.

Abnormalities in behavior are manifested by one or more of the following signs:

- a. walking in circles or show an abnormal gait or posture
- b. pushing its head against a wall
- c. charging at various objects and acting aggressively
- d. showing a dull and anxious expression in the eyes



An **abnormal gait** in an animal is associated with pain in the legs, chest or abdomen or is an indication of nervous disease.

Abnormal posture in an animal is observed as tucked up abdomen or the animal may stand with an extended head and stretched out feet. The animal may also be laying and have its head turned along its side. When it is unable to rise, it is often called a “downer”. Downer animals should be handled with caution in order to prevent further suffering.

Abnormalities in structure (conformation) are manifested by:

- swellings (abscesses) seen commonly in swine
- enlarged joints
- umbilical swelling (hernia or omphalophlebitis)
- enlarged sensitive udder indicative of mastitis
- enlarged jaw (“lumpy jaw”)
- bloated abdomen

Some examples of **abnormal discharges** or protrusions from the body are:

- discharges from the nose, excessive saliva from the mouth, afterbirth
- protruding from the vulva, intestine
- protruding from the rectum (prolapsed rectum) or uterus
- protruding from the vagina (prolapsed uterus)e. growths on the eye and bloody diarrhoea

Abnormal color such as black areas on horses and swine, red areas on light colored skin (inflammation), dark blue areas on the skin or udder (gangrene).

An **abnormal odour** is difficult to detect on routine A/M examination. The odour of an abscess, a medicinal odour, stinkweed odour or an acetone odour of ketosis may be observed. Since many abattoirs in developing countries have not accommodation station or yards for animals, Inspector's ante mortem judgment must be performed at the admission of slaughter animals

The Decision

The main purpose of A/M inspection is to separate the normal and abnormal stock

Normal animals ----- sent to slaughter

Abnormal animal ----- unfit for slaughter(affected with localize lesions , show P/M changes , delay of slaughter , Fatigued or excited animal ,casualty slaughter)



The stock unfit for slaughter :

- emaciated animals
- affected with certain disease (Tetanus)
- affected with communicable disease (Rabies)
- animal which carry toxic residue- may be held until the residues are Excrete