

Regional Training Course on Abattoir Surveillance for Contagious Bovine Pleuropneumonia (CBPP)

24 – 27 March 2026, Nairobi, Kenya

CBPP ABBATTOIR SURVEILLANCE: STANDARDISING SURVEILLANCE METHODS

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WHY SURVEILLANCE AT ABATTOIRS

Abattoirs are the best surveillance point because:

- Animals from many areas arrive
- Chronic cases are detected
- Lesions are clearly visible
- Outbreak detection is possible
- Animals treated with antibiotics may be suspected
- Low-cost Surveillance Activities

PURPOSE OF HARMONISED METHODS

Standardisation allows:

- Better diagnosis
- Comparable data between regions
- Faster reporting
- Stronger control programmes concerning:
 - CBPP
 - Some Zoonotic diseases
 - Utilisation of antimicrobials



PRACTICAL ANTE-MORTEM INSPECTION CHECKLIST TAILORED FOR CBPP





ANNEX A

ANTE-MORTEM INSPECTION FORM

1. General Information

Slaughterhouse Name: _____

Official Veterinarian or Meat Inspector: _____

Date: _____

Time of Inspection: _____

Number of animals inspected: _____

Source farm / Holding ID: _____

Farmer name: _____

Transporter / Vehicle ID: _____

Batch / Lot number: _____

Animal ID number or brand: _____



ANNEX A

ANTE-MORTEM INSPECTION FORM

2. Clinical Assessment for CBPP

Parameter	Yes	No	Remarks
Fever ($\geq 39.5^{\circ}\text{C}$)	<input type="checkbox"/>	<input type="checkbox"/>	
Respiratory distress / Dyspnea	<input type="checkbox"/>	<input type="checkbox"/>	
Coughing (persistent, painful)	<input type="checkbox"/>	<input type="checkbox"/>	
Nasal discharge	<input type="checkbox"/>	<input type="checkbox"/>	
Abnormal respiratory sounds (pleuritic noises)	<input type="checkbox"/>	<input type="checkbox"/>	
Weight loss / Emaciation	<input type="checkbox"/>	<input type="checkbox"/>	
Pain on palpation of thorax	<input type="checkbox"/>	<input type="checkbox"/>	
Lethargy / Weakness	<input type="checkbox"/>	<input type="checkbox"/>	
Abnormal posture /reluctance to move	<input type="checkbox"/>	<input type="checkbox"/>	

ANNEX A

ANTE-MORTEM INSPECTION FORM

3. Epidemiological Risk Indicators

Item	Yes	No	Remarks
Recent movement from CBPP-risk region	<input type="checkbox"/>	<input type="checkbox"/>	
Previous CBPP outbreaks at farm of origin	<input type="checkbox"/>	<input type="checkbox"/>	
No valid health certificate	<input type="checkbox"/>	<input type="checkbox"/>	
Suspicious mortality reported on farm	<input type="checkbox"/>	<input type="checkbox"/>	
Contact with suspect / infected herds	<input type="checkbox"/>	<input type="checkbox"/>	

ANNEX A

ANTE-MORTEM INSPECTION FORM

4. Inspector's Decisions

Option	Check	Remarks
Fit for slaughter	<input type="checkbox"/>	
Temporarily withheld for further examination	<input type="checkbox"/>	
Immediate isolation of suspect animals	<input type="checkbox"/>	
Notification to Competent Authority	<input type="checkbox"/>	

ANNEX A

ANTE-MORTEM INSPECTION FORM

5. Sample collections

Sample	Yes	No	Remarks
Blood	<input type="checkbox"/>	<input type="checkbox"/>	
Nasal swab	<input type="checkbox"/>	<input type="checkbox"/>	

6. Additional Comments

Signature (Official Veterinarian or Meat Inspector): _____

CASE DEFINITIONS

Suspected animal (AM):

- Fever (rare)
- Frequent coughing
- Dyspnoea or tachypnoea
- Abnormal stance (elbows abducted)
- Nasal discharge
- Weight loss (frequent)



ANTE-MORTEM SURVEILLANCE WHAT TO DO WITH SUSPECT ANIMALS

- Segregate immediately
- Identify animal / lot
- Record information
- Plan enhanced PM inspection





ANTE-MORTEM SURVEILLANCE: WHAT TO DO WITH SUSPECT ANIMALS

AM Sampling

When possible:

- Blood for serology
- Link samples to animal ID

But sampling must NOT delay lesion
detection

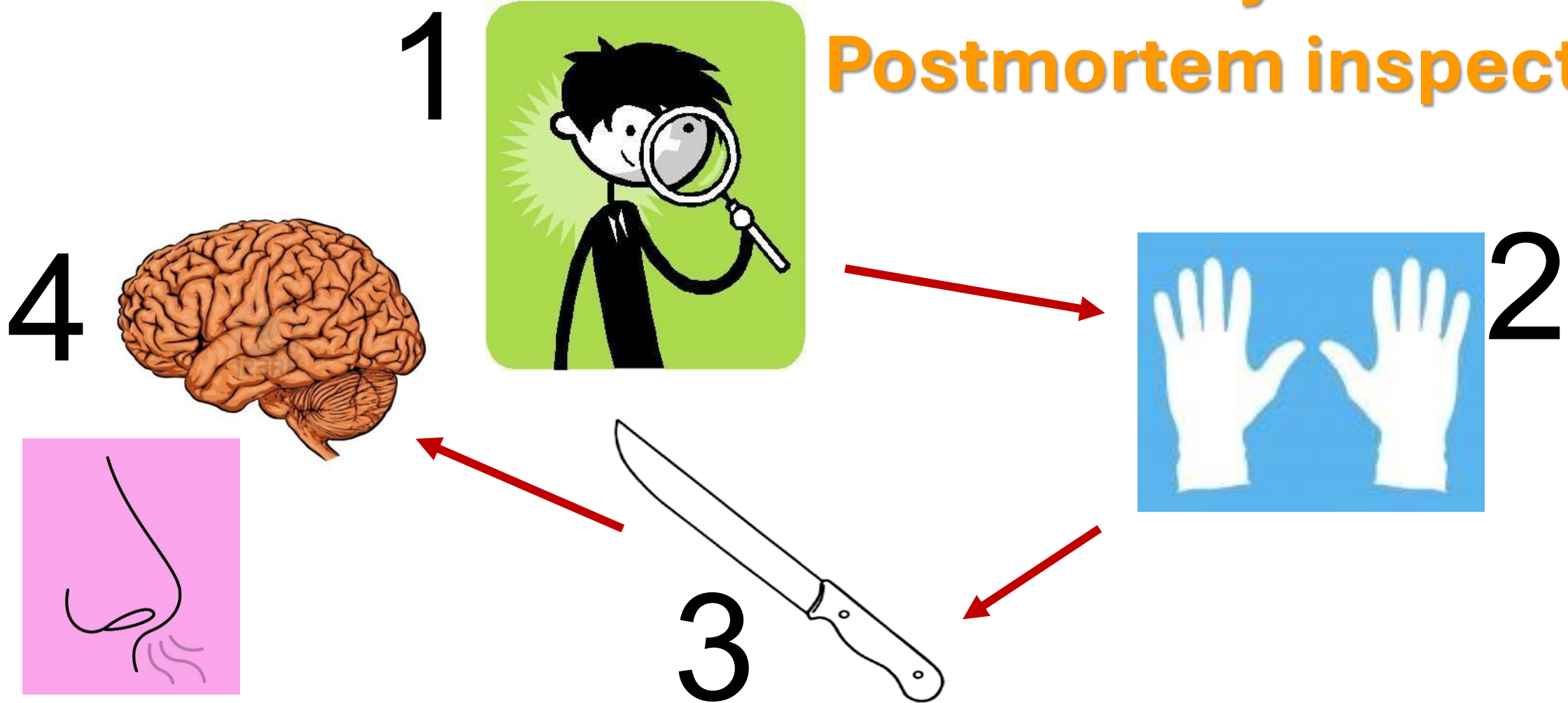




PRACTICAL POST-MORTEM INSPECTION CHECKLIST TAILORED FOR CBPP



Thoracic cavity and Lungs; Postmortem inspection





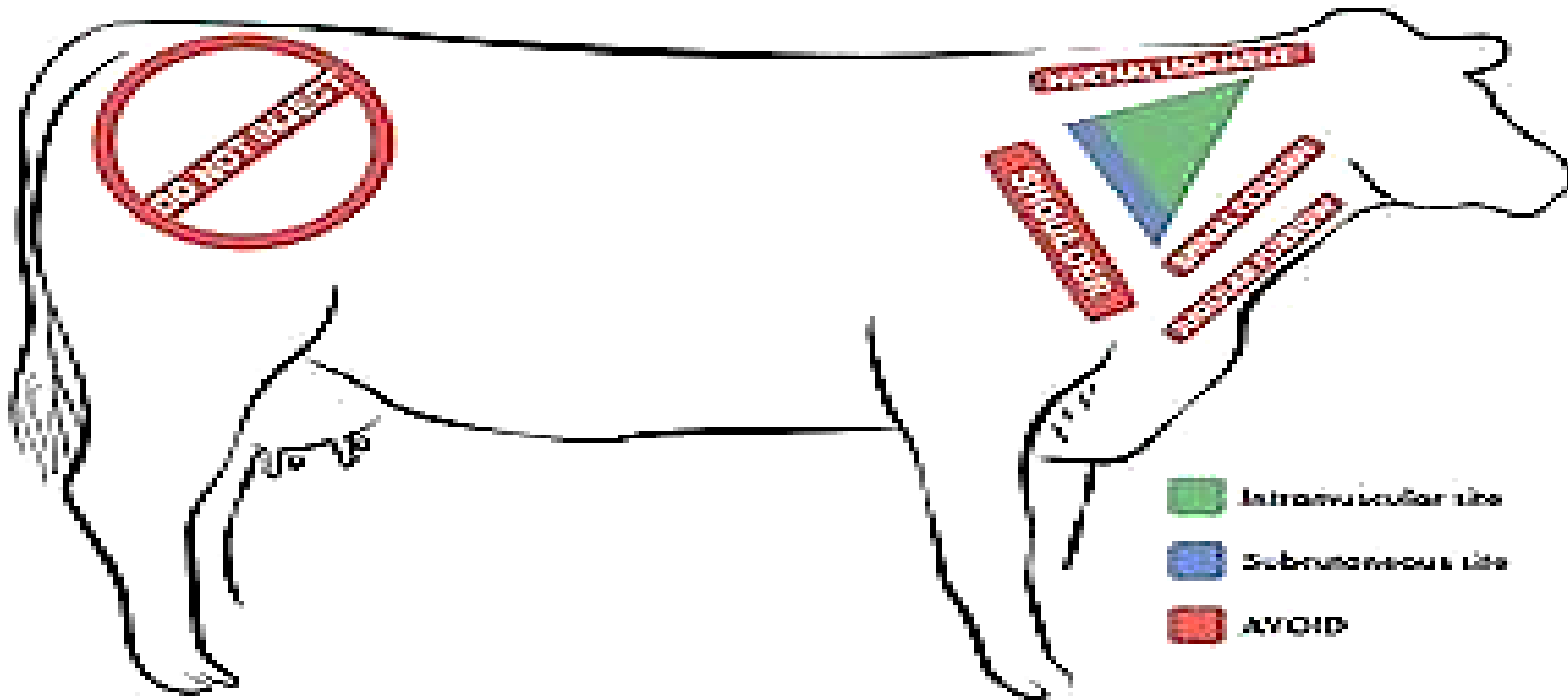
ZOONOTIC DISEASES LESIONS

Suspected carcass (PM):

- Cysticercosis lesions
- Echinococcosis lesions
- Fascioliasis lesions
- Sarcocystosis lesions
- Bovine Tuberculosis



PM Inspection and AMR





ANNEX B

POST-MORTEM INSPECTION FORM

1. General Information

Slaughterhouse Name: _____

Official Veterinarian or Meat Inspector: _____

Date: _____

Time of Inspection: _____

Number of animals inspected: _____

Source farm / Holding ID: _____

Farmer name: _____

Transporter / Vehicle ID: _____

Batch / Lot number: _____

Animal ID number or brand: _____



ANNEX B

POST-MORTEM INSPECTION FORM

2. Macroscopic Lesions Findings

Please also comply with the requirements specified in Appendix 3.

Lesion	Present	Absent	Remarks
Unilateral lesions	<input type="checkbox"/>	<input type="checkbox"/>	
Fibrinous pleuritis	<input type="checkbox"/>	<input type="checkbox"/>	
Pleural adhesions	<input type="checkbox"/>	<input type="checkbox"/>	
Fibrinous exudate	<input type="checkbox"/>	<input type="checkbox"/>	
Pulmonary consolidation	<input type="checkbox"/>	<input type="checkbox"/>	
Marmorisation	<input type="checkbox"/>	<input type="checkbox"/>	
Interlobular Septa Ectasic	<input type="checkbox"/>	<input type="checkbox"/>	
Sequestra	<input type="checkbox"/>	<input type="checkbox"/>	
Emaciation / poor body condition	<input type="checkbox"/>	<input type="checkbox"/>	
Emaciation / poor body condition	<input type="checkbox"/>	<input type="checkbox"/>	

ANNEX B

POST-MORTEM INSPECTION FORM

3. Inspection of Injection Sites

Parameter	Yes	No	Remarks
Muscular necrotic lesions at typical IM injection sites	<input type="checkbox"/>	<input type="checkbox"/>	
Fibrosis or granuloma at injection site	<input type="checkbox"/>	<input type="checkbox"/>	

ANNEX B

POST-MORTEM INSPECTION FORM

4. Sampling

Sample Type	Taken	Not Taken	Remarks
Lung tissue	<input type="checkbox"/>	<input type="checkbox"/>	
Thoracic lymph nodes	<input type="checkbox"/>	<input type="checkbox"/>	
Pleural exudate	<input type="checkbox"/>	<input type="checkbox"/>	
Suspect muscle tissue (injection sites)	<input type="checkbox"/>	<input type="checkbox"/>	

ANNEX B

POST-MORTEM INSPECTION FORM

5. Decision

Action	Select	Remarks
Carcass approved	<input type="checkbox"/>	
Carcass detained pending lab results	<input type="checkbox"/>	
Carcass condemned	<input type="checkbox"/>	
Notification to Competent Authority	<input type="checkbox"/>	
Epidemiological follow-up recommended	<input type="checkbox"/>	

Region
Contagious Bovine Pleuropneumonia (CBPP)

24 – 27 March 2026, Nairobi, Kenya



COMESA
SPS Project

ANNEX B

POST-MORTEM INSPECTION FORM

6. Additional Comments/Observations

Signature (Official Veterinarian or Meat Inspector):

CASE DEFINITIONS

Suspected carcass (PM):

Lungs and pleura showing one or more of the following unilateral , occasionally bilateral lesions:

- Fibrinous pleuritis and Adhesions
- Marbled hepatisation and thickness of interlobular septa
- Sequestra (necrotic foci with a fibrous capsule)
- Odourless



POST-MORTEM SURVEILLANCE

MINIMUM SAMPLING PANEL

Collect:

- Pleural fluid
- Lung tissue
- Lymph nodes
- Serum



POST-MORTEM SURVEILLANCE

SAMPLE PACKAGING

Use triple packaging:

1. Leak-proof tube
2. Sealed secondary container
3. Rigid outer box with ice



CBPP CONFIRMED CASE

Confirmed when:

- PCR positive
- Culture positive
- Compatible serology

Lab confirmation recommended but not always possible and in my opinion necessary





POST-MORTEM SURVEILLANCE

REPORTING

CBPP is a notifiable disease.

Report immediately when:

- Typical lesions found
- Multiple suspects in same lot
- Positive lab result (when it is possible)





POST-MORTEM SURVEILLANCE

POST-MORTEM DECISION

- Affected lungs → Conditional approval and destruction of lungs
- Systemic disease-Poor Body Score → Carcass condemnation





POST-MORTEM SURVEILLANCE

DATA RECORDING

Always record:

- Animal ID
- Origin
- AM signs
- PM lesions
- Samples taken





POST-MORTEM SURVEILLANCE

ROLES

Official veterinarian:

- Supervise inspection
- Authorise sampling
- Report cases

Meat inspector:

- Detect lesions
- Record data
- Assist sampling





POST-MORTEM SURVEILLANCE

KEY INDICATORS

Monitor:

- Lesion detection rate
- Sample submission rate
- Lab confirmation rate
- Reporting time





POST-MORTEM SURVEILLANCE

BIOSECURITY

- PPE
- Disinfection of tools
- Safe waste disposal
- Protect staff and food chain





POST-MORTEM SURVEILLANCE

TRACEABILITY

Keep link between:

Animal → Lot → Farm → Market → District

Essential for outbreak control





POST-MORTEM SURVEILLANCE

COMMON PROBLEMS

- No recording forms
- Poor sample quality
- Late reporting
- No training

Solutions: training + supervision using
Veterinary Remote Assistance





POST-MORTEM SURVEILLANCE

FIELD TIPS FOR AFRICA

- Use photo guides
- Train paraprofessionals
- Use mobile reporting and Veterinary Remote Assistance (training and standardisation is needed)
- Work and train traditional and community leaders





Standardising Surveillance Methods: Antimicrobial Treatments and Zoonotic lesions





Antimicrobial Treatments and PM Inspection

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Antimicrobial Treatments and AM&PM inspection

Animals that present during *ante-mortem* visit,
mild clinical symptoms

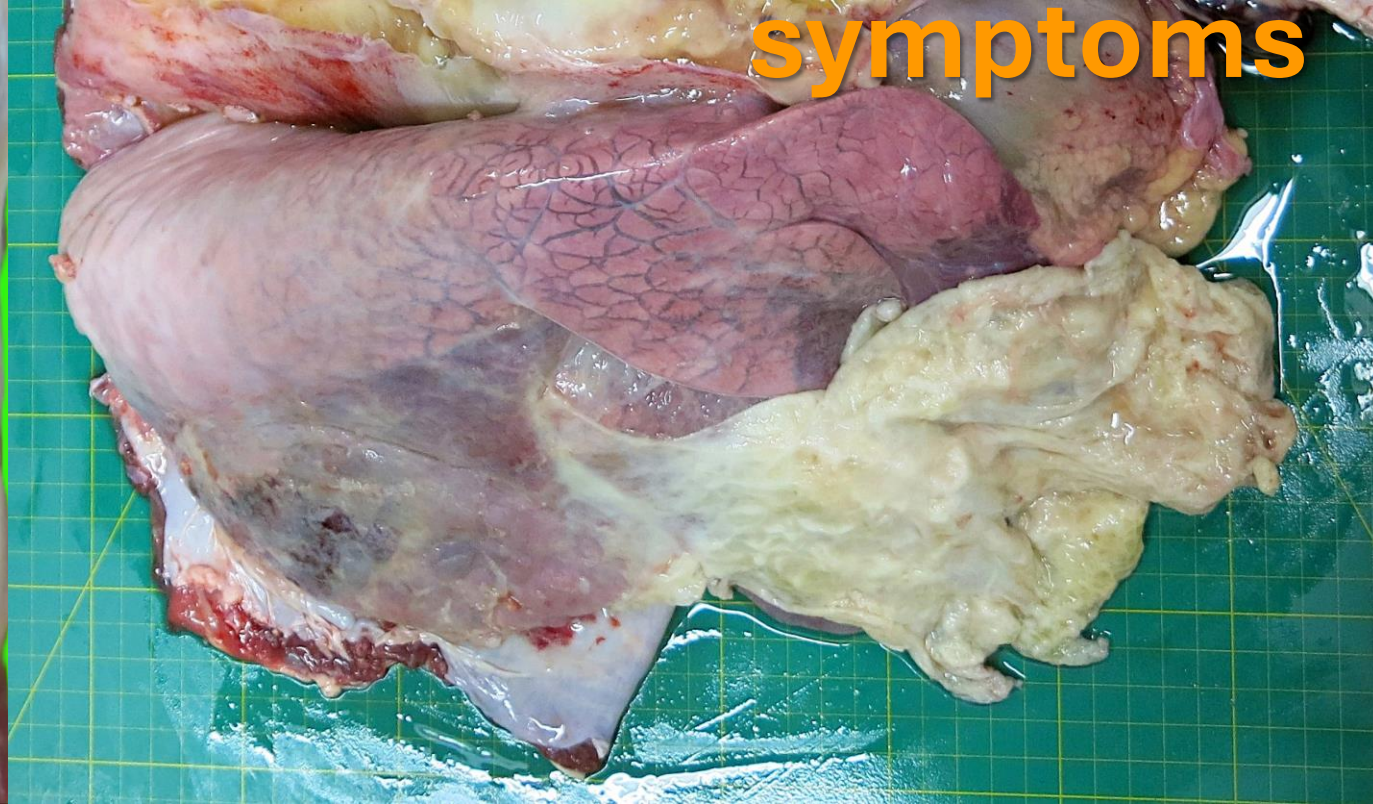
but on

post-mortem examination **show** acute or sub-acute
lesions, referable to CBPP, **should be considered**
suspected of having been treated with antibiotics





Ante-mortem visit: mild clinical symptoms





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Antimicrobial Treatments and PM



**Necrotic
muscle lesions
potentially
associated
with long-
acting
antibiotic
treatments**

Antimicrobial Treatments and PM

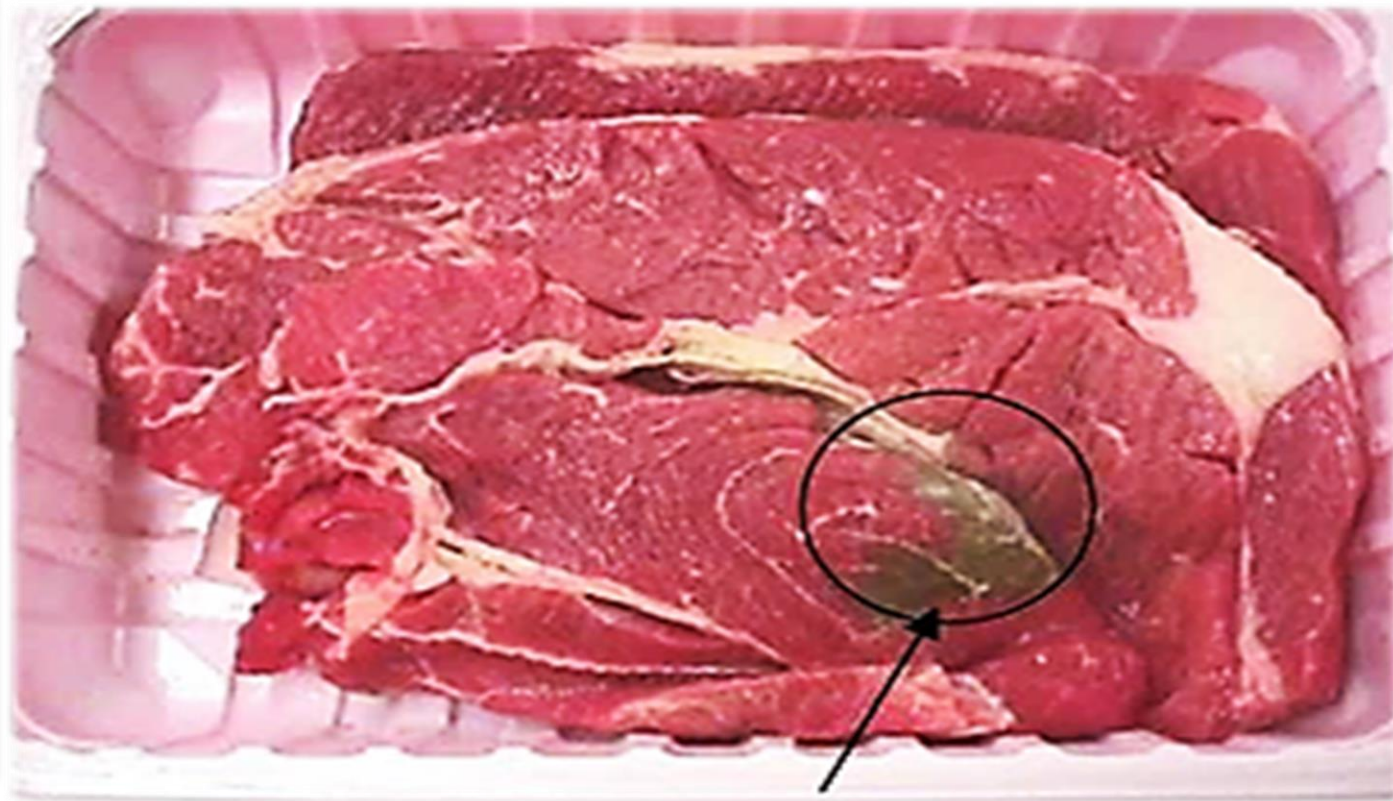
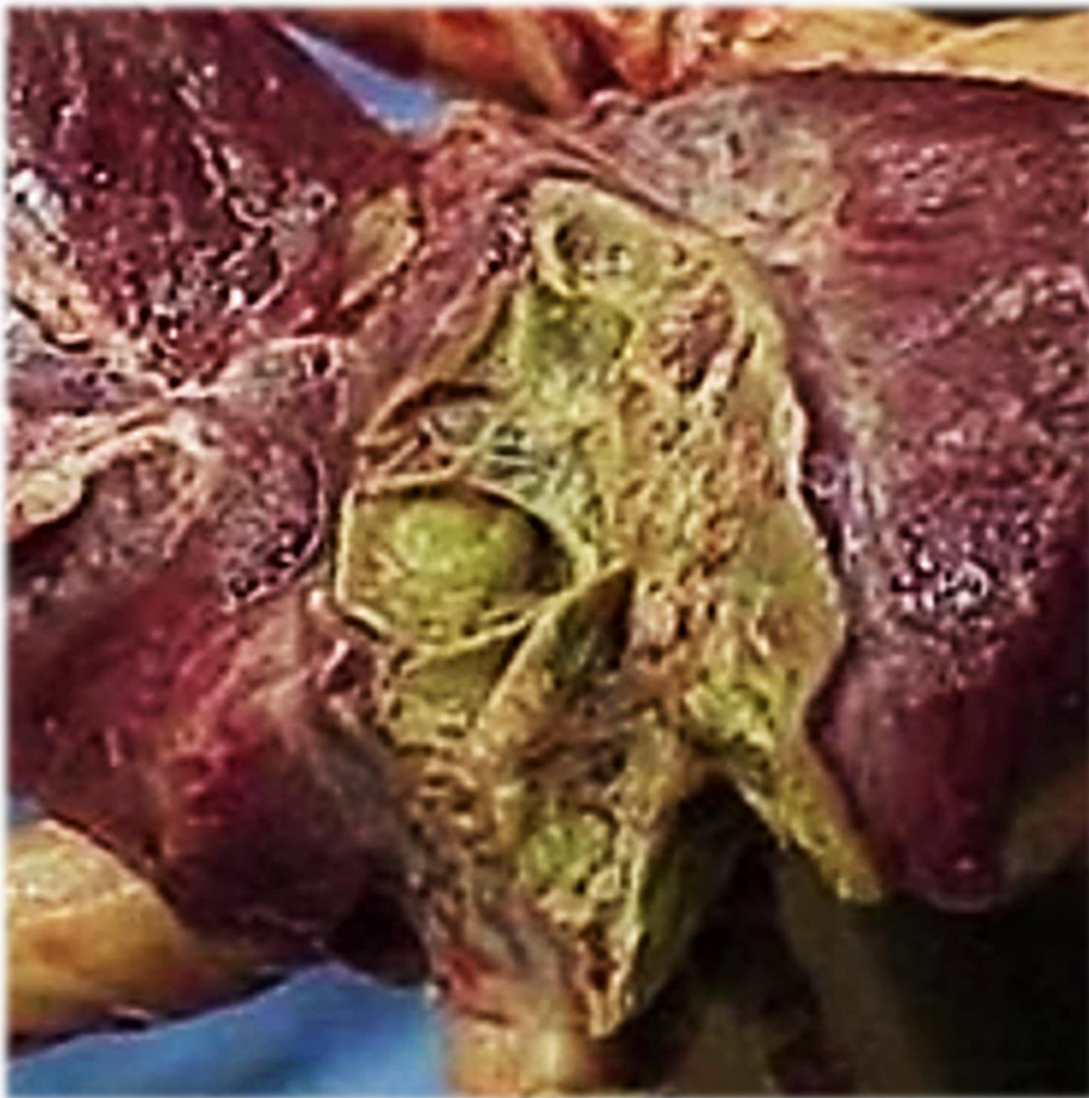


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Antimicrobial Treatments and PM



Antimicrobial Treatments and PM

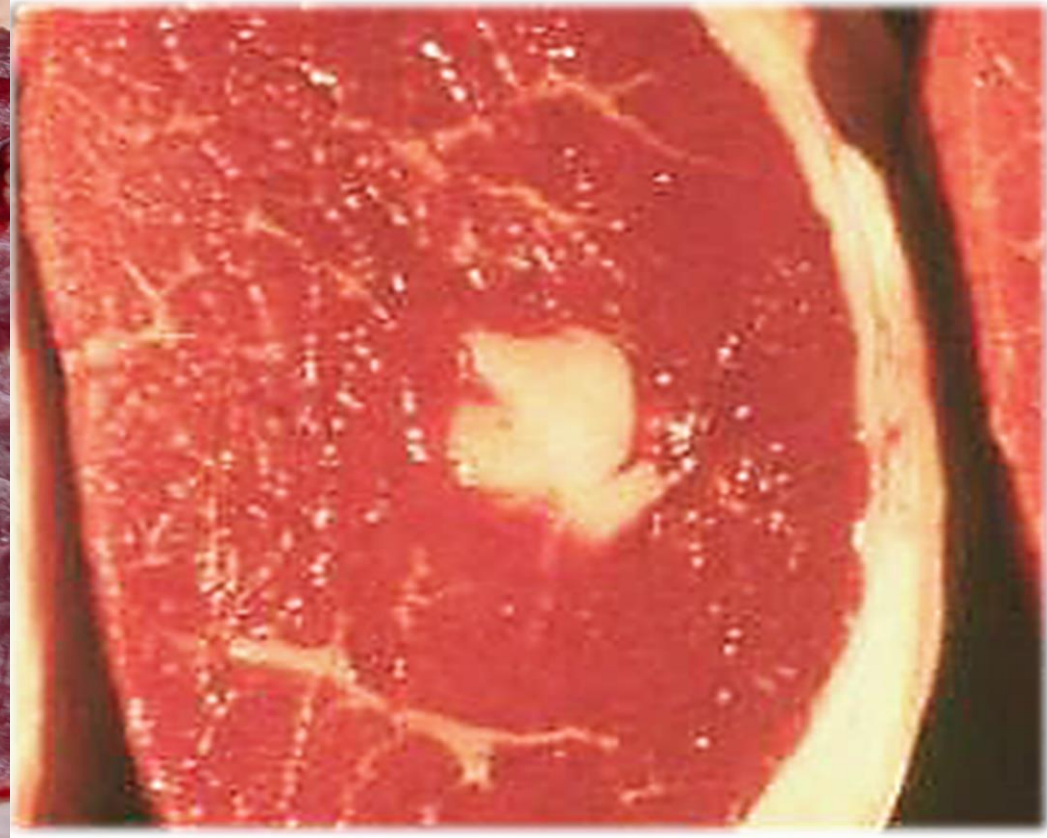


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Antimicrobial Treatments and PM



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Antimicrobial Treatments and AM&PM inspection

**In such cases, antibiotic
residues must always be
searched for!**





PM Inspection and Zoonosis

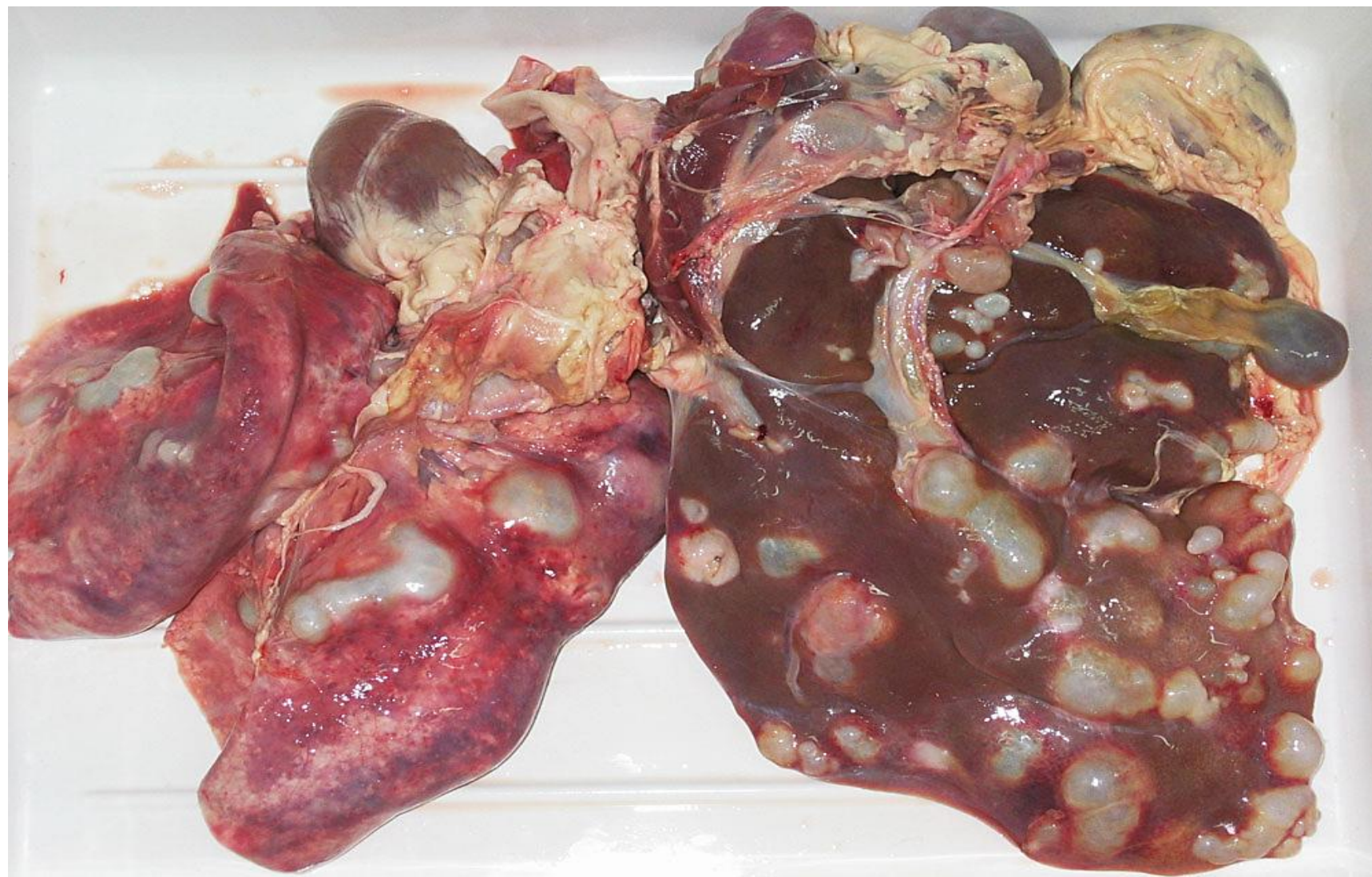
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Echinococcus granulosus



Idatidosis in man; hepatic cysts



Cysticercus in Masseteric muscle



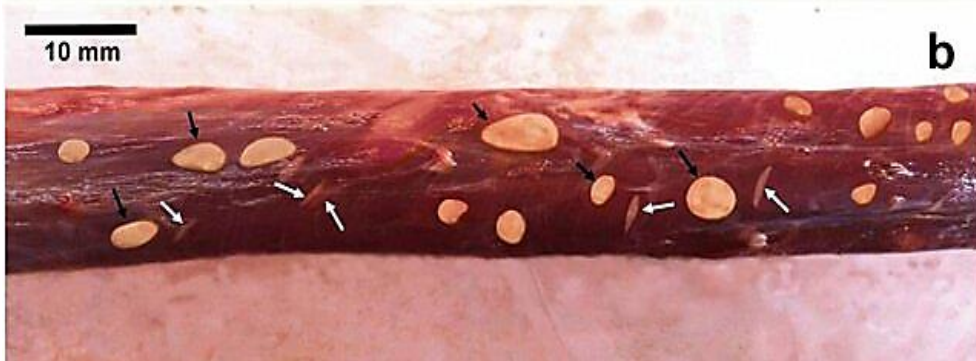
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Sarcocystosis

In cow's diaphragm and oesophagus





Fascioliasis



Fascioliasis in Humans

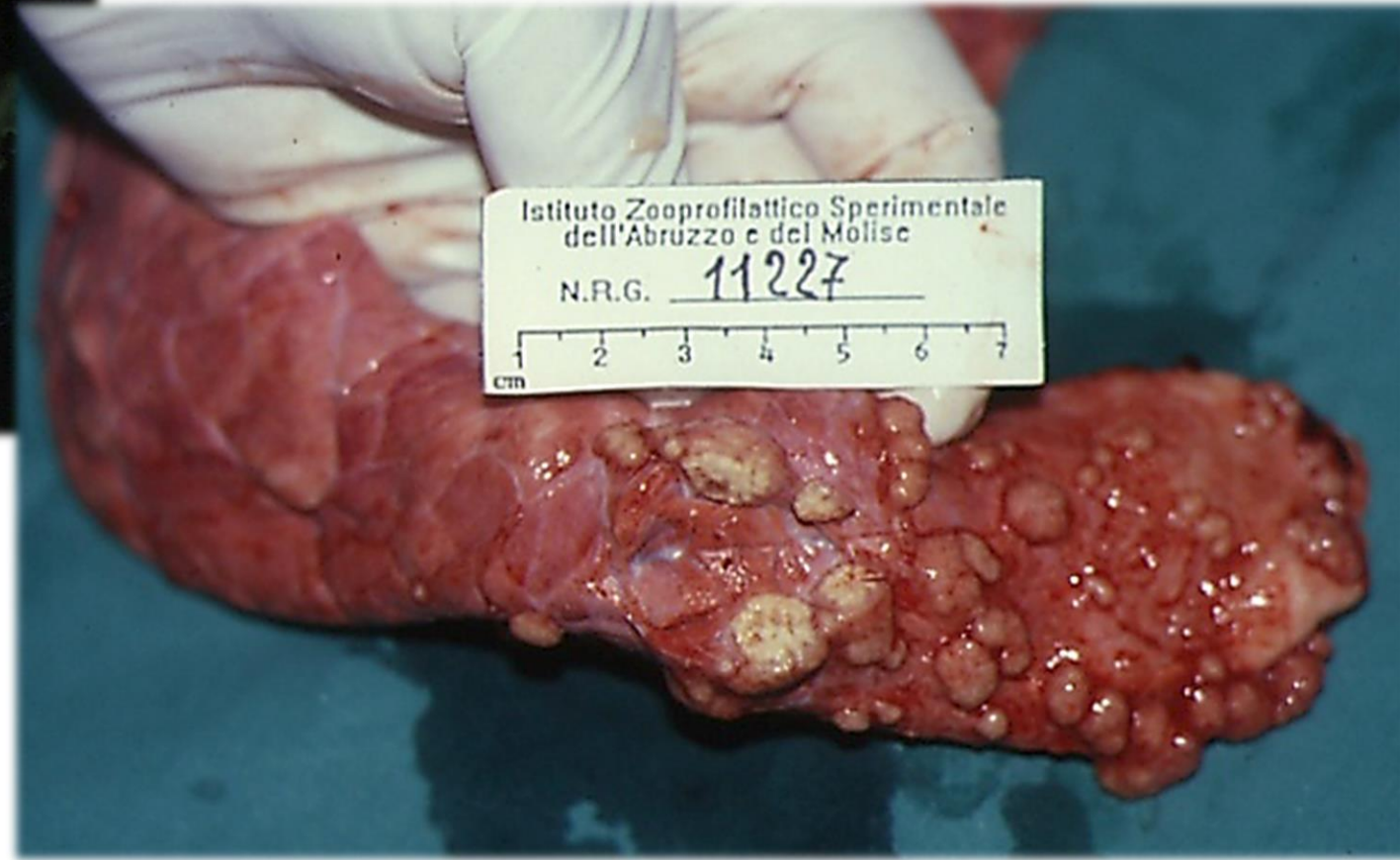


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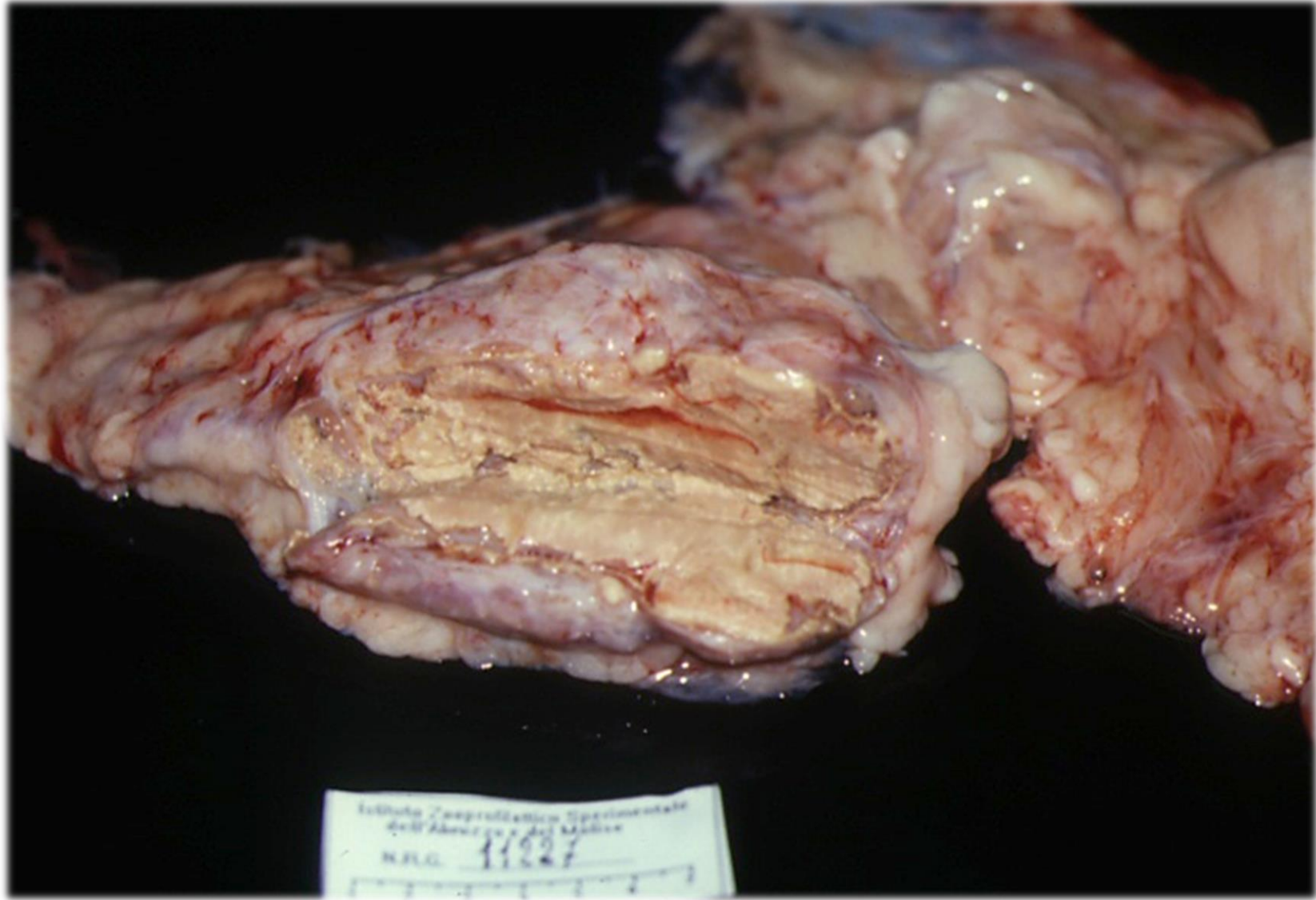


Bovine Tuberculosis Lung





Bovine Tuberculosis Lymph nodes



Bovine Tuberculosis in Humans



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ZOONOTIC AND ANTIMICROBIAL TREATMENT LESIONS

REPORTING

Report immediately, for zoonotic and suspect antimicrobial treatment lesions to Veterinary Services and Public Health Office indicating the animals origins



POST-MORTEM SURVEILLANCE

POST-MORTEM DECISION

- Mandatory destruction of organs infected with zoonotic agents
- Necrotic muscular lesions caused by suspected antibiotic inoculation, associated with acute–subacute CBPP lesions and absence of clinical signs:condemnation of the

carcass.





Key Message

- Post-mortem inspection combines diagnostic, epidemiological, and pharmacological insight.
- Each carcass inspected strengthens national CBPP surveillance.
- Detecting both CBPP lesions and suspect antibiotic-related damage improves Public Health control.
- Abattoirs act as strategic surveillance points for zoonosis and drugs monitoring.



Thank you!

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