

GF-TADS Africa PROGRESSIVE CONTROL OF TRANSBOUNDARY ANIMAL DISEASES





Food and Agriculture Organization of the **United Nations**



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Challenges and aspirations in the control of CBPP: abattoir surveillance

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"The most efficient means of detecting CBPP is through effective meat inspection procedures at abattoirs followed by laboratory examination of suspect lesions"

WOAH ad-hoc group on CBPP surveillance systems



Can abattoir surveillance to assess the level of CBPP in a cattle population?



In the *ante-mortem* inspection sick animals are not allowed to be slaughtered.

As a result, the proportion of cattle with CBPP in the abattoir is likely to be much lower than the proportion on farms.

Therefore, abattoir surveillance is biased.



The *ante-mortem* inspection in some areas/countries is less restrictive than in others.

This means that it is more common in some countries for sick animals to be sent to an abattoir and slaughtered.

As a result, abattoir surveillance in these areas/countries is more useful for detecting CBPP.



The main advantages:

 It is inexpensive - therefore the abattoir surveillance costs are primarily related to *PM* data capture, and any laboratory tests performed for the monitored disease.



 It allows collection of photos and diagnostic specimens, such as blood or pleural fluid and tissue samples (when a laboratory is available for testing).



The main advantages:

- It can cover a very large number of animals from a relatively small number of abattoirs that slaughter animals from a large number of farms or villages (thereby decreasing the data collection costs).
- It provides a relatively constant supply of surveillance data.



But, in order to have standardised Abattoir Surveillance results, it is crucial to define which slaughtered animals are taken into consideration in the studies carried out by the different research groups:

- Randomly examined;
- With respiratory symptoms;
- With CBPP suspicious pathological lesions;
- All animals slaughtered.



Purpose

- CBPP Abattoir Surveillance when the disease is <u>present</u> in the country
- CBPP Abattoir Surveillance when the disease is <u>absent</u> in the country



"FIRST OF ALL,

TO BE ABLE TO RECOGNISE CBPP"

TRAINING FOR HEALTH TECHNICIANS, MEAT INSPECTORS AND VETERINARIANS. FARMERS?









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HYPERACUTE LESIONS

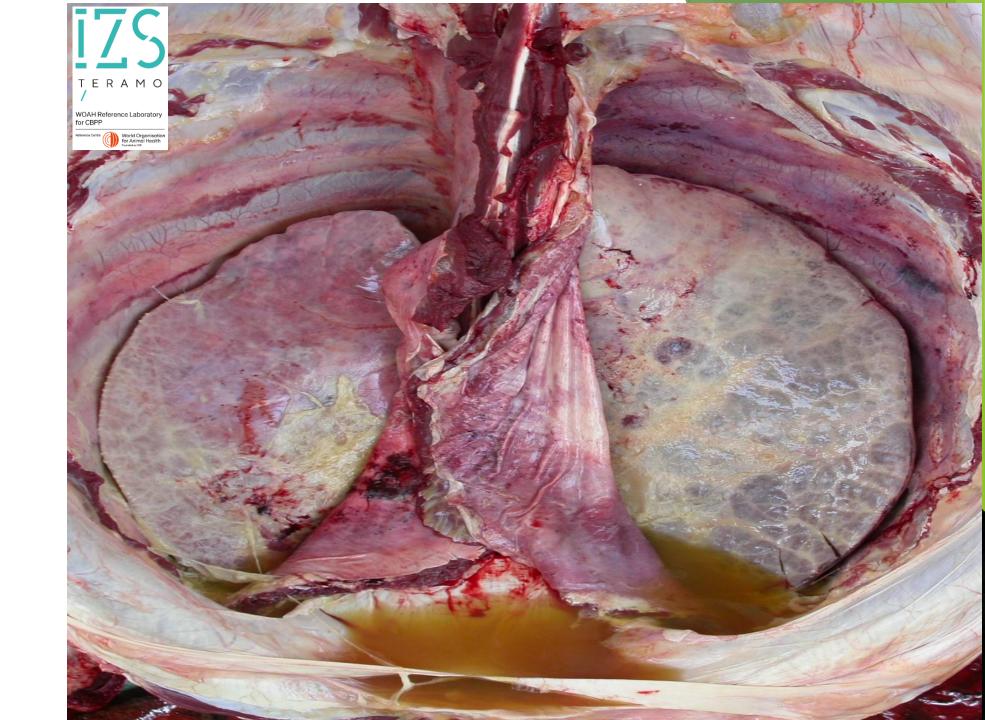


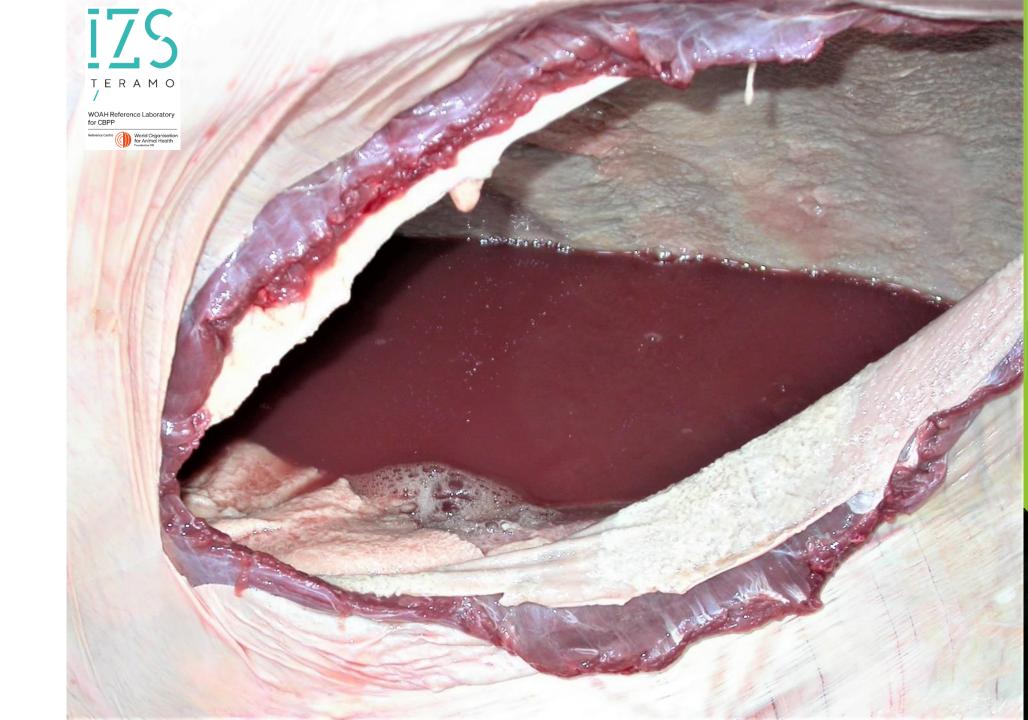






ACUTE-SUBACUTE LESIONS

















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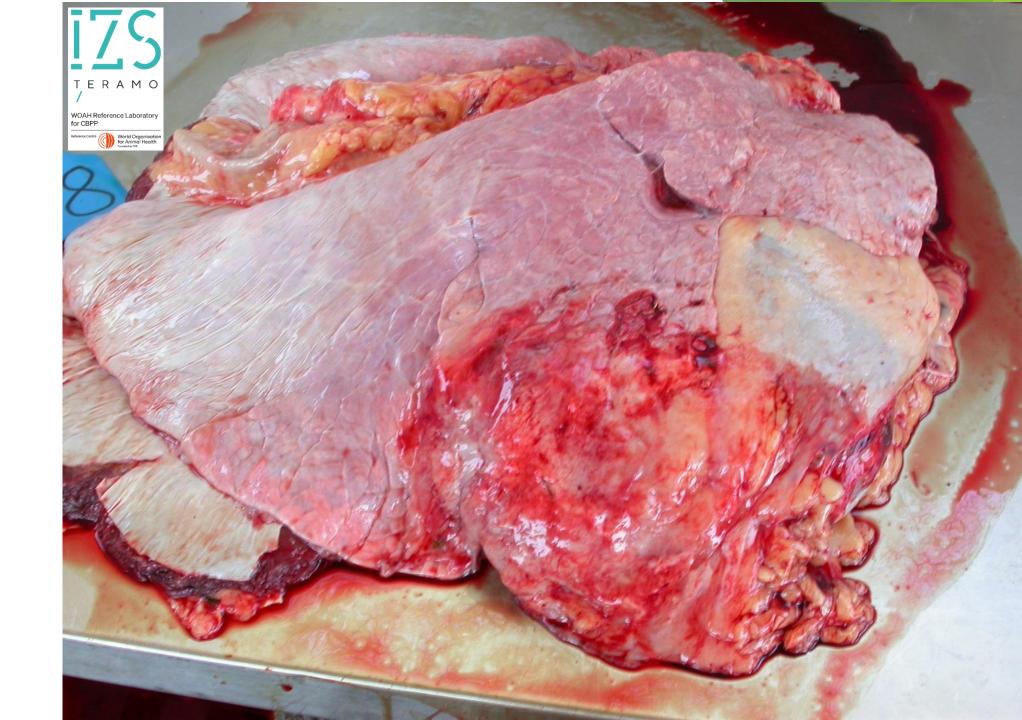
Source: Dr G. Muuka-Zambia



SUBACUTE-CRONIC LESIONS

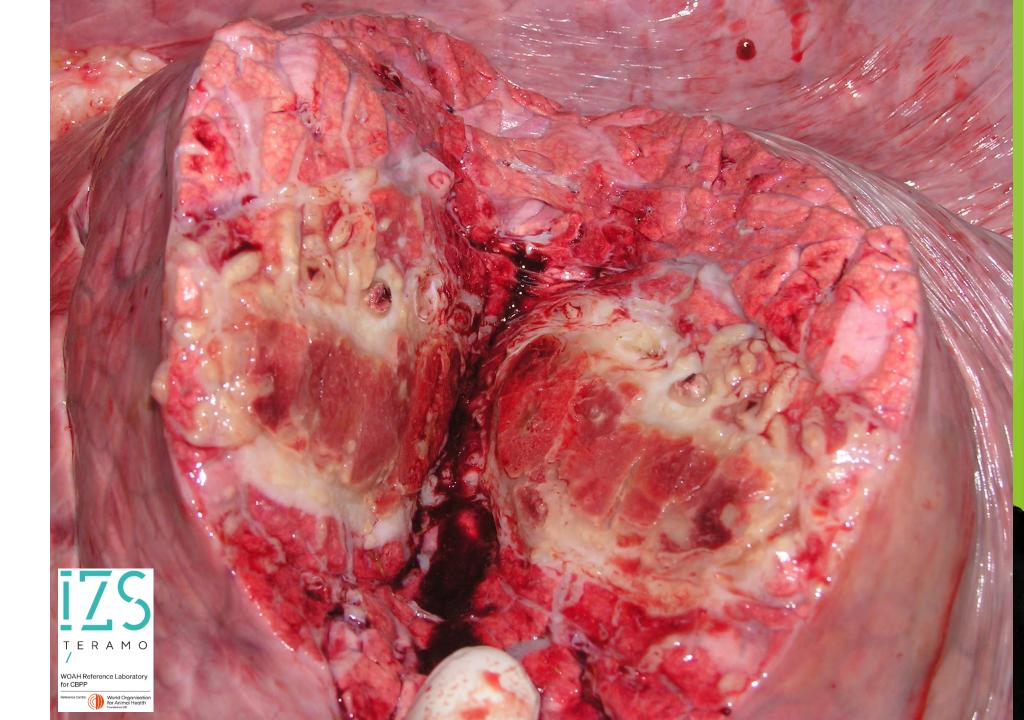




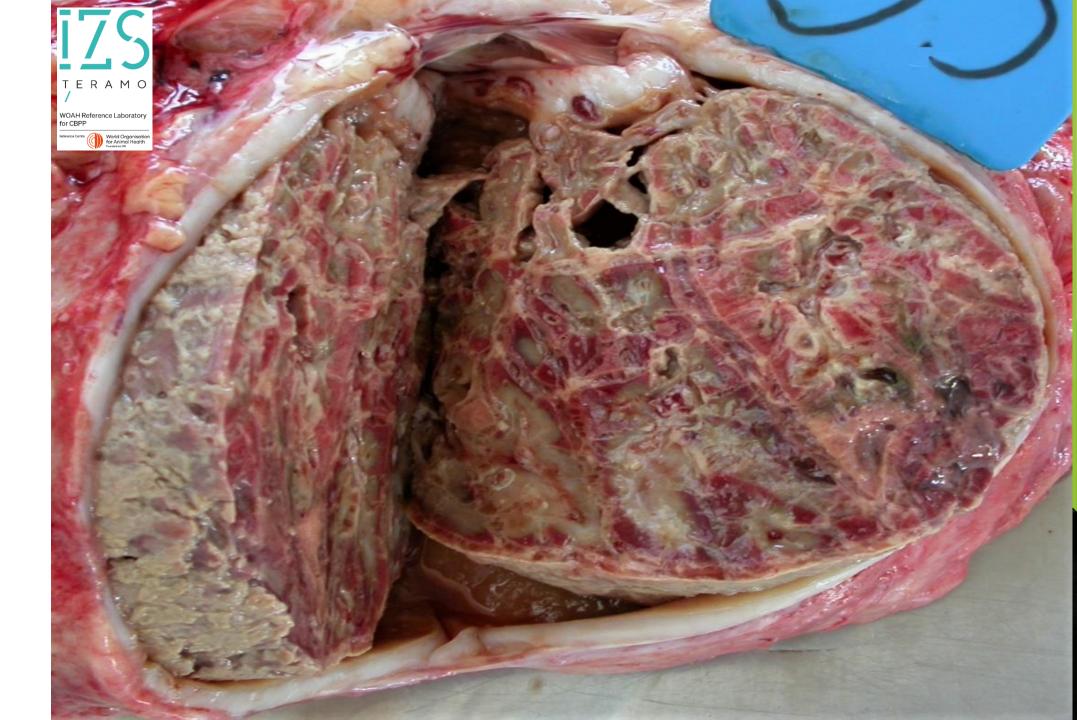


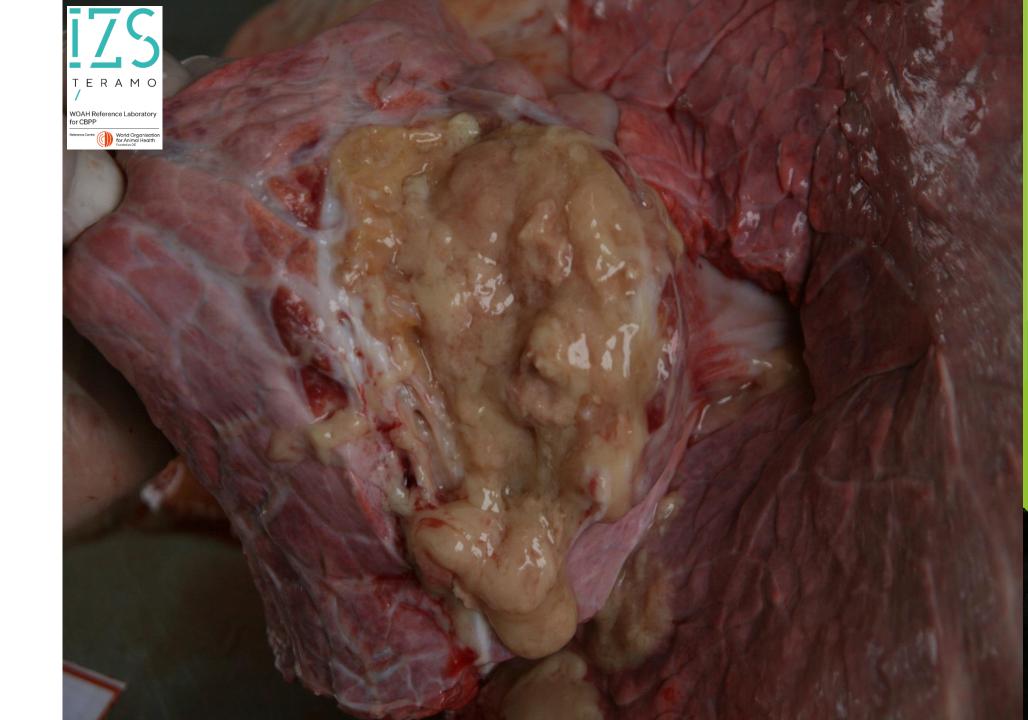


















Abattoir Surveillance; New Approaches

CBPP abattoir surveillance, needs, in my opinion, new approaches such as **Telediagnosis** and **Mobile App photo collection** of CBPP lesions and differential diagnosis for technicians, veterinarians but also breeders.



Abattoir Surveillance; New Approaches

Photos and additional standardized information have to be send from the field and the abattoirs to experts, via Mobile App, for quick feedback. If there is a strong suspicion, the Veterinary Service has to be activated

Abattoir Surveillance; New Approaches

These notifications supplemented with the expert's remote evaluation could be sufficient for the country's Veterinary Services Directorate to report the presence of CBPP in that specific area at International/Regional level.

Abattoir Surveillance; New Approaches

But, what about sampling

activity?



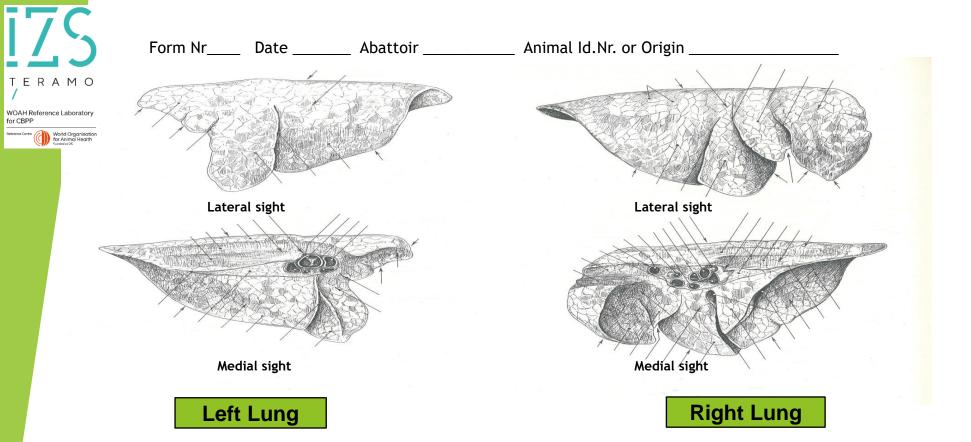
Abattoir Surveillance; New Approaches

This approach will require **online/onside training** on how to collect standardised:

- Epidemiological data (Abattoir form);
- Clinical symptoms;
- Pathological lesions;
- Organ photos, using mobile phone.



CBPP CHEST CAVITY LESIONS STANDARDISATION



| | Acute lesions | Necrosis | Sequestra | Pleuritis | Pleural fluid |
|---------------------|---------------|----------|-----------|-----------|---------------|
| Left apical | | | ø | | ml |
| Right apical | | | ø | | |
| Left cardiac | | | Ø | | |
| Right cardiac | | | Ø | | |
| Accessory lobe | | | Ø | | |
| Left diaphragmatic | | | Ø | | |
| Right diaphragmatic | | | ø | | |



WOAH Reference Laboratory for CBPP World Organisation for Animal Health Thank you!

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