

5. Confirmatory diagnosis where samples are collected and then tested in the laboratory.



Laboratory testing of samples



HOW TO IDENTIFY COMMON SYMPTOMS IN SICK ANIMALS

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HOW TO DETECT SICK FROM HEALTHY FARM ANIMALS

1. What is health and disease in farm animals?

Health is the state of being free from illness or injury while disease is an abnormal condition that negatively affects the structure or function of part or whole of an organism (animal). The animal has a defense mechanism against disease known as the immune system, which fights off diseases. This is made up of anatomical structures (like skin and mucous membranes which prevent the entry of disease-causing agents), white blood cells and antibodies.

2. Characteristics of a healthy farm animal

- Normal body structure
- Alert and bright as observed visually
- Normal gait or walking
- Smooth hair coat
- Moist muzzle
- Normal life or vital parameters namely:
 - Feeding and water intake
 - Breathing/respiration both rate and force: in cattle is per minute
- Passing urine of normal colour (brownish) and at normal posture and frequency
- Passing dung of normal consistency, colour and at normal frequency
- Normal rectal temperature: cattle 38-39°C.
- Normal growth rate of young ones and milk production for lactating animals.

3. Signs of a sick farm animal

Diseases in farm animals can occur in two forms namely:

- Clinical form** – it has obvious disease signs.
- Sub-clinical form** – this is where the animal is infected but does not show any signs of disease.

A sick farm animal will show the following signs:

- Being inactive and dull with a hanging head.
- Hair coat is rough and dull.
- The skin is tight.

- The muzzle becomes dry and warm.
- Eyes become dull, sunken and with discharges.
- The animal does not eat well and losses appetite.
- Abnormal behaviour and posture- like the dog-sitting position of cows.
- Abnormal body temperature like fever.
- Abnormal gait/walking.
- Poor body condition or emaciation.
- Changes in the consistency of faeces like diarrhoea or constipation
- Changes in the colour of urine such as red urine (babesiosis, bracken fern poisoning)
- Abnormal breathing including; coughing and difficulty in breathing
- Abnormal colour, particularly of mucous membranes such as paleness indicating anaemia, yellowness indicating jaundice and black spots indicating melanosis.
- Abnormal discharges from natural body openings like lacrymation/tearing, pus, blood
- Abnormal protrusions from natural body openings like retained afterbirth, prolapses
- Changes in conformation or appearance such as swellings and bloated abdomen
- Abnormal smell/odour: from drugs, punctured abscesses or feeds
- Slowed growth rate (including stunting) and reduced production.



Healthy looking cow



A sick looking cow

4. Methods of identifying a sick farm animal:

- Animal inspection – this involves observing the animal in its natural environment without disturbing it.
- On-farm testing by the farmer such as the use of California Mastitis Test (CMT) and pen-side mastitis test strip for detecting subclinical mastitis in milking animals.



On-farm testing of mastitis using CMT

- Use of farm records – This helps in identifying diseases resulting in reduced production and lowered growth rate.
- Physical examination - This is done by animal health service providers and may require the use of diagnostic aids such as a thermometer, stethoscope.