

Diagnostic chart based on disease signs and observations

Diseases of Cattle in East Africa

1. Lead symptom: Died very suddenly – animal(s) not seen sick before death

All the diseases below can cause sudden death in cattle. The additional observations listed intend to guide you towards the most likely causes - but do not allow for confirmation of any particular disease. To get more information please follow links below.

Additional observations:

Un-clotted blood oozing from body openings (nose, anus), grazing in dry flood zone	→ Anthrax
Swelling of muscle surface & gas under the skin (crackling sound), esp. 1 to 3 year olds	→ Blackquarter
Feeding on clover / some legumes /green sorghum, abdomen extremely enlarged, froth in nose	→ Bloat
Painful swelling on neck /brisket, extremely fast breathing, froth in nose	→ Haemorrhagic Septicaemia
Animals grazing wet area or flood-zone, in swamps and marshes	→ Black Disease (Liver Fluke)
Many ticks, only exotic cattle (= European breed) affected, convulsions, froth in nostrils	→ Heartwater
<i>Other possible reasons why cattle can die suddenly are:</i>	
Cattle have access to improperly stored chemicals, use of insecticide spray on/near cattle	→ Poisoning
Small bite marks on the head or leg	→ Snake bites
Sudden death only affecting suckling calves	→ Calf problems

2. Lead symptom: Coughing and/or pus and watery fluid coming from the nose

All the diseases below can cause respiratory disease in cattle. The additional observations listed will guide you towards the most likely causes - but do not allow for confirmation of any particular disease. To get more information please follow links below.

Additional observations:

Acute

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| After climatic/transport stress or crowding/mixing of animals, many very sick at once | → Pasteurellosis |
| Young animals suddenly sick, most recover, some don't and become very sick | → Calf Pneumonia |
| Very fast breathing, swollen lymph glands, froth in nostrils / mouth | → ECF |

Chronic

- | | |
|--|----------------|
| Deep dry cough, shallow fast breathing, grunt when exhaling, progressive loss of condition | → CBPP |
| Occasional low moist coughing, mostly single adult animal, progressive loss of condition | → Tuberculosis |
| Dry cough, chronic disease, esp. young animals on cool and wet highland pastures | → Lung worms |
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3. Lead symptom: Diarrhoea - scouring

All the diseases below can produce diarrhoea in cattle. The additional observations listed will guide you towards the most likely causes - but do not allow for confirmation of any particular disease. To get more information please follow links below.

Additional observations:

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|--|---|
| Rains, esp. young cattle, feeding normally, poor body condition, not growing | → Worms Stomach & Intestines |
| Few calves dying, some without diarrhoea, necrotic ear tips in calves, sporadic abortion | → Salmonellosis |
| Only young suckling calves affected by and dying from diarrhoea | → Calf Scour |
| Mainly 8 months to 2 years old, dull, lesions inside mouth | → Bovine Virus Diarrhoea /Mucosal Disease |
| Chronic diarrhoea in an adult, progressively losing condition, feeding normally | → Johne's Disease |
| Acute, diarrhoea, lactating cow affected, fever, off-feed, udder is hot and swollen | → Coli mastitis |
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4. Lead symptom: **Loosing condition, ribs sticking out, rough coat**

With all the diseases listed below cattle do severely loose condition. The additional observations listed will guide you towards the most likely causes - but do not allow for confirmation of any particular disease. To get more information please follow links below.

Additional observations:

Feeding normally, rainy season, mainly young cattle, often diarrhoea	→ Worms Stomach & Intestine
Feeding normally, weak, anaemia, sometimes diarrhoea	→ (Blood-sucking) Worms Stomach & Intestine
Feeding normal, bottle jaw (= oedema on lower jaw), grazing in marsh / near swamp	→ Liver Fluke
Very sleepy, pale membranes (around eyes), large lymph glands, area has Tse-Tse flies	→ Trypanosoma
Feeding normally, dull or abnormally coloured hair coat	→ Mineral deficiency
Dry cough, ongoing respiratory disease problem in the herd since weeks and months	→ CBPP
Occasional low cough, sometimes also diarrhoea, mostly single adult animal	→ Tuberculosis
Chronic diarrhoea in an adult, progressively loosing condition, feeding normally	→ Johne's Disease
Very thin, drought or insufficient access to quality feed; very hard coarse silage	→ Starvation
Wet, grazing inside thicket, very high tick load, pale membranes (around eyes)	→ Tick worry

5. Lead symptom: **Abortion**

All the diseases below can cause abortions in cattle. The additional observations listed will guide you towards the most likely causes - but do not allow for confirmation of any particular disease. To get more information please follow links below.

Additional observations:

Most foetuses are expelled near term, very often retained placenta after the abortion	→ Brucellosis
Very strong rains, females abort at all stages of pregnancy, newborns dying	→ Rift Valley Fever
Late abortion, foetus decomposed, animals fed on poor quality silage (bad smell)	→ Listeriosis
Late abortion, wet pasture (standing puddles), cow may be sick before abortion (jaundice)	→ Leptospira
Some calves dying without clear signs, some animals with severe diarrhoea	→ Salmonella

Abortion between 4 and 6 months of pregnancy (often unnoticed), birth of paralysed calf	→ Neospora
Early abortion (first 4 to 5 months hence often unnoticed), poor herd conception rate	→ Trichomonas

6. Lead symptom: Pale membranes or jaundice, often swollen lymph glands

With the diseases listed below cattle can develop anaemia (visible as pale/white membranes around the eyes) or jaundice (yellow membranes around the eyes) and have swollen glands. The additional observations listed will guide you towards the most likely causes - but do not allow for confirmation of any particular disease. To get more information please follow links below.

Additional observations:

Adult animal, first pale membranes later jaundice, dark-red urine, constipation/diarrhoea	→ Babesia
Esp. in adults, membranes first pale then yellow, constipation/diarrhoea-similar to Babesia	→ Anaplasma
Large glands, fever, cloudy eyes, fast breathing, sometimes diarrhoea, very sick & getting worse	→ ECF
Large glands, deteriorating slowly, very weak, always sleepy, pale membranes, area has Tse-Tse	→ Tryps
Normal feeding, anaemia, normal glands, sometimes diarrhoea	→ (Blood-sucking) Worms Stomach & Intestines

7. Lead symptom: Lesions on the skin

All the diseases listed below can produce lesions on the skin of cattle. The additional observations listed will guide you towards the most likely causes - but do not allow for confirmation of any particular disease. To get more information please follow links below.

Additional observations:

Painful nodules on skin (later become small wounds), inflamed eyes, running nose	→ Lumpy Skin
Tufts of hair coming off easily (esp. neck & shoulder), bold plaques, scabs, during rains	→ Dermatophilus
Round hairless skin lesions, become confluent, not itchy, esp. in young animals	→ Ringworm
Very itchy skin lesion with hair loss and thickening of skin (can look like elephant skin)	→ Mange
Affects light coloured skin parts most exposed to sun, skin sloughing off, not itchy	→ Photosensitisation

Rubbing, scratching and biting the skin, sometimes also anaemia	→ Lice (massive infection)
Bleeding spot on skin, attracts flies and does not heal for a long time	→ Filaria

8. Lead symptom: Lesions in the mouth and on the head

All the diseases listed below can produce lesions inside the mouth, on the head and/or affect the eyes of cattle. The additional observations listed will guide you towards the most likely causes - but do not allow for confirmation of any particular disease. To get more information please follow links below.

Additional observations:

Drooling, lameness, erosions on tongue / gums and also between the claws	→ Foot & Mouth Disease
Very sick(!), inflamed eyes (milky-blue), ulcers in mouth, crusts on nostrils	→ Malignant Catarrhal Fever
Weeping, one eye (rarely both) affected, eye: cloudy/white/blue/milky, temporary blind	→ Pink Eye
Small blood spots in the eye - come and go (also inside vulva), nose bleeding, 'poached egg eye'	→ Ondiri
Lesions inside mouth, weeping, mainly 8 months to 2 years old, severe diarrhoea	→ Mucosal Disease
Weeping (both eyes), eyes cloudy, very sleepy, poor condition, large lymph glands, Tse-Tse flies	→ Tryps
Very sick, cloudy / milky eyes, high fever, fast breathing, swollen lymph glands	→ ECF
Bottle jaw, grazing in or near marsh/swamp	→ Liver fluke

9. Lead symptom: Paralysis / Central nervous disorder / circling

With all the diseases listed below cattle can be paralysed or show abnormal movement and behaviour. The additional observations listed will guide you towards the most likely causes - but do not allow for confirmation of any particular disease. To get more information please follow links below.

Additional observations:

Single animal affected, drooling, knuckling of hind fetlock, trying to pass faeces, bellowing	→ Rabies
Coordination problems, exotic cattle affected, convulsions, froth in nostrils before death	→ Heartwater
Fed on poor silage, drooping ear, blind, circling, tongue hanging out, also abortions	→ Listeriosis

Stiff, unable to stand up, can't swallow, flaccid tongue, slight bloat	→ 3-Day Sickness (Ephemeral Fever)
Very good milker in peak lactation, sleepy, sometimes licking & biting itself, can get excited	→ Ketosis
Older cow immediately after calving, too weak to stand up but trying	→ Hypocalcaemia (milk-fever)
Blindness, head pushing, aimless wandering, slowly progressing, become recumbent	→ Tapeworm (cyst)

10. Lead symptom: Lameness

With all the diseases listed below cattle can go lame. The additional observations listed will guide you towards the most likely causes - but do not allow for confirmation of any particular disease. To get more information please follow links below.

Additional observations:

Common causes of lameness in cattle are foot problems due to injury and lack of foot care:

- Abscess of the heel, the coronary band, the white line, the sole
- Foreign body (stone) between the claws or penetrating the sole
- Ulcers of the sole
- Footrot (cheesy material in lesion between the claws, very smelly)
- Crack of the hoof wall
- Overgrown claws (corkscrew claw, scissor claw)

Infectious causes of lameness in cattle:

Drooling, erosions on tongue & gums and also between the claws	→ Foot & Mouth Disease
Some unable to stand up, can't swallow, flaccid tongue, slight bloat	→ 3-Day Sickness (Ephemeral Fever)
Swelling of muscle, gas under the skin (crackling sound), esp. 1 to 3 year olds	→ Blackleg/Blackquarter
Drooling, knuckling of hind fetlock, trying to pass faeces, bellowing	→ Rabies