

Foot and Mouth Disease

Clinical Examination

It is important to have a systematic approach to examining animals suspected of foot and mouth disease. Write down your findings as you examine animals. A prepared form may help you do this efficiently.

Firstly, take a clinical history from the farmer:

- What clinical signs have they noticed? Lameness, drooling, not eating, any deaths, any abortions?
- When did the signs start?
- Which animals have been affected? How many?
- Which ones are the most recent cases?



Next, observe the animals from a distance:

- General demeanour/stance
- Salivation/increased jaw movement
- Lameness/shifting weight



Finally carry out a clinical examination of as many animals as possible to fully assess the situation:

- Ensure good restraint-remember FMD is painful
- Take the animal's temperature
- Examine the likely sites of vesicles thoroughly - muzzle, mouth, feet including the interdigital space (clean off dirt) and udder
- Enquire about milk yield if appropriate
- Record your findings for each animal, including animal identity no.



Lesion ageing

- Lesion ageing is important for epidemiological investigations. Lesion ageing allows you to establish a likely time period in which clinical signs first appeared, and from this, the likely time period in which infection took place, and when viral shedding could have begun.
- When carrying out lesion ageing in order to determine the likely date of infection of a group of animals, it is important to examine all animals, looking for the oldest lesions.
- For diagnostic sampling search for the most recent case with the freshest lesions.

Day of Clinical Disease	Appearance of lesion
Day 1	Blanching of epithelium followed by formation of fluid filled vesicle.
Day 2	Freshly ruptured vesicles characterised by raw epithelium, a clear edge to the lesion and no deposition of fibrin.
Day 3	Lesions start to lose their sharp demarcation and bright red colour. Deposition of fibrin starts to occur.
Day 4	Considerable fibrin deposition has occurred and regrowth of epithelium is evident at the periphery of the lesion.
Day 7	Extensive scar tissue formation and healing has occurred. Some fibrin deposition is usually still present.