

Biosecurity

Biosecurity is about reducing the risk of disease spreading to your farm and your neighbours, by taking practical measures on your farm. During an outbreak of FMD, extra precautions are essential; however, good biosecurity is always advisable and can protect your farm from many other diseases.

Control access to your farm:

- If possible, have only one access point. Secondary gates that are not in use should be locked to eliminate the possibility of unauthorised entry.
- Ensure your farm boundaries are secure and maintain any fences.

Restrict unnecessary visitors to your farm:

- People and vehicles should not enter your farm premises unless absolutely necessary.
- Remember: if they have been on other farms, they could potentially be carrying FMD virus.
- If they must enter your farm, ensure they follow the cleaning and disinfection procedures.
- Keep a record of all essential visitors and vehicles entering your farm.
- Where possible, vehicles should be parked outside your farm rather than driving onto it.

Cleaning and disinfecting equipment:

- Have the proper equipment, including a bucket of disinfectant, a brush, water and a hose at the entrance to your farm for all visitors to use on themselves and their vehicles.
- The disinfectant should be approved, effective against FMD virus, kept fresh, and made up to the correct concentration (see <http://www.agriculture.gov.ie/footandmouth/> for a list of approved disinfectants).
- Farm machinery and equipment can readily spread FMD and should not be permitted entry to your farm under any circumstances. Organic matter, including faecal material lodged in the wheel-arches of vehicles can carry FMD virus from farm to farm.
- Cleaning should precede disinfection: remember, clumps of mud or dirt will reduce the effectiveness of any disinfectant used and can prevent the disinfectant working on FMD virus.
- Ensure all visitors clean and then disinfect themselves, especially their footwear and hands, and their vehicles, particularly the tyres and wheel arches, prior to entering your farm.
- They should also clean and disinfect themselves and their vehicle when they leave.

Avoid visiting other farms:

- If you visit another farm, you risk both bringing FMD virus back to your farm and introducing the virus to the other farm.
- If the visit is unavoidable, do not wear the same clothes or footwear you use when working with your own stock.
- Ensure you clean and disinfect yourself, especially your hands, and your vehicle when arriving at and leaving the other farm.
- Wash the clothes you wore on the other farm at a high temperature wash cycle, prior to wearing them near your own animals.

Checking animals for FMD

- During an outbreak, it is important to check your stock regularly for FMD.
- If your farm is in a high-risk area, you may be advised to do this on a daily basis.
- This should be done in good light with the animals properly restrained.
- The mouths, snouts and feet should be checked for blisters, which may be ruptured, or open sores.
- Keep in mind the clinical signs described above, especially lameness and unwillingness to feed in a group of animals.

What to do if you suspect FMD

If you suspect FMD in any of your animals, you must report it **immediately** to your local District Veterinary Office (DVO). Early diagnosis can dramatically reduce disease spread, so do not delay.

If you are reporting a suspicion of disease, do not allow people, animals, vehicles, carcasses or anything else associated with animals off the farm until further advice is given to you by a Department of Agriculture Veterinary Inspector.

Further information

Further information on FMD is available at www.agriculture.gov.ie.



Introduction

Foot and mouth disease (FMD) is one of the most contagious diseases of animals, and an outbreak can have severe economic consequences. It affects cattle, sheep, pigs, goats and other cloven hoofed animals. It is caused by FMD virus, which is very infectious and can persist in the environment for some time. If an outbreak of FMD occurred in Ireland, other countries would not accept our animals or animal products until several months after the disease was eradicated, causing huge financial losses.

Clinical signs and disease

FMD causes fluid-filled blisters to develop on the tongues, dental pads, noses and feet of affected animals. These can be very painful, and affected animals become lame, go off their food and salivate excessively. Animals develop a fever just before the blisters appear. When the blisters burst, the skin is left raw and open. The disease is severe in pigs and cattle but can be difficult to spot in sheep.

Infected dairy cattle have a reduced milk yield, while young animals, particularly piglets and lambs, may die without showing obvious signs. Pregnant sheep may abort.

Most adult animals will recover from FMD after 10-14 days. Dairy cattle may never return to full milk yield.

FMD in cattle:

- Excessive salivation and lip smacking
- Lameness
- Fever
- Loss of appetite
- Reduced milk yield
- Blisters in mouth, between toes and at heels



FMD in sheep:

- Lameness
- Fever
- Abortions and deaths in young lambs
- Blisters in the mouth and on the feet; these can be difficult to spot



FMD in pigs:

- Severe lameness
- Fever
- Loss of appetite
- Pigs may huddle together
- Blisters on the snout, in the mouth and on the feet, especially where the horn joins the skin; these may rupture and the horn may completely detach



Transmission and spread

Infected animals shed virus in blister fluid, saliva, milk, breath, urine and faeces, and can also shed virus before blisters appear.

The disease is transmitted to other animals by three main routes:

1. Direct contact between an infected animal and a susceptible animal, for instance, animals touching nose to nose across a fence.
2. Indirect contact between animals, where a susceptible animal is exposed to virus from an infected animal. This could be a contaminated person or vehicle moving between farms, or equipment used on one farm after another, transporting the virus.

3. Airborne spread. Infected animals, particularly pigs, can exhale virus in their breath; animals on other farms downwind may become infected by this route.

Control measures

Control measures against FMD are designed to reduce direct and indirect spread of the disease.

Movement ban:

The movement of cattle, sheep, pigs, goats and other susceptible species on or off farms is restricted following an outbreak. This is to prevent animals which are infected but are not yet showing signs of the disease from introducing it to other farms.

Culling of infected animals:

When FMD is confirmed in a herd or flock, all susceptible animals on the farm are culled. This is to reduce the amount of virus excretion and to prevent further spread of disease.

Culling of dangerous contact animals:

If a farm has been recently linked to a premises infected with FMD, disease control experts may decide that the risk of this farm also being infected is so high that a pre-emptive cull is justified. Since animals may excrete virus before the appearance of blisters, it may be too dangerous to wait and see if disease develops.

Other measures:

Many other disease control measures are used to stop an outbreak, including examining and testing animals on farms in a high risk area, tracing animals, people and equipment that have been on or near infected farms, and tracing and destruction of animal products from infected farms.

Vaccination

Vaccines are available against FMD virus, but are unlikely to be used during an outbreak in Ireland for economic reasons. It takes at least three months longer to regain trading status if vaccination is used than if slaughter out alone is applied. Some third country markets can take considerably longer to open. The decision to vaccinate would be taken by the Minister for Agriculture on the advice of the Chief Veterinary Officer.