

## **Chapter 1 PROCEDURES WHEN FMD IS SUSPECTED**

### **Introduction**

FMD is a highly contagious disease and the economic effects of an outbreak on the farming and rural communities, in particular, are extremely serious. It is vital, therefore, that any report of a suspected case be responded to with the utmost urgency and efficiency.

This section details the procedures to be followed immediately such a report is received. It covers the procedures to be followed by the Veterinary Inspector, Technical Agricultural Officer and Research Officer investigating the case and the protocols for biosecurity and clinical examination, restriction notices and reporting of examination results.

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### **1. Scenarios**

The VI may be presented with one of three scenarios at a farm on which FMD is suspected:

- 1.1 The most likely is a ‘first case’ scenario. Such a case requires a high level of clinical expertise and the VI may in many instances need laboratory support in making his or her diagnosis.
- 1.2 When, or even before, the first case has been confirmed FMD positive experience in other countries has shown that the situation is likely to quickly escalate into a ‘mid’ or possibly a ‘worst case’ scenario.

As further reports of suspect disease are received, the role of the RO and the laboratory service will change. Resources will be stretched and very soon the Research Officer will not be available to support the routine Suspect report. At this point ROs will be more involved in the management of samples from the field, their subsequent dispatch, and be called upon to support the management element both at Local Disease Control Centre (LDCC) and the Regional Veterinary Laboratory (RVL).

- 1.3 Decisions on the serving of forms and notices in addition to the sampling regime will be undertaken in consultation with the National Disease Control Centre (NDCC). The key objectives at this stage will be the implementation of a standstill, clinical examinations, sample procurement, valuation and slaughter. These will have to be met within 24hrs of the suspected case being reported. Policy decisions on the use of suppressive vaccination or slaughter of contiguous herds or herds within the 1 Km Zone of the infected holding will be made by the NDCC.

## **2. Definition of a suspect animal**

Article 2 of Council Directive 2003/85/EC defines an “animal suspected of being infected” as:

*“any animal of a susceptible species exhibiting clinical symptoms or showing post-mortem lesions or reactions to laboratory tests which are such that the presence of foot-and-mouth disease may reasonably be suspected.”*

## **3. Responsibility of the owner/person in charge of the suspect animal**

(a) Article 3 of the FMD Order requires that:

*“any person having, or having had in their possession or under their charge, an animal or carcase affected with or suspected of being affected with FMD to immediately notify the Gardaí”*

In practice notification is usually made directly to the local District Veterinary Office or Department of Agriculture & Food Headquarters.

(b) Article 3 of the FMD Order also requires that: for 24 hours after notification, the following may not be removed from the holding:

*“Person, animal, carcase, horse, ass, mule, dog, cat, poultry or thing”*

## **4. Responsibility of the Competent Authority (CA)**

Article 4 of Council Directive 2003/85/EC requires the following to be done immediately by the CA:

- The holding be placed under restriction
- The suspect report be officially investigated
- The necessary samples be taken (see Appendices 7A and 7B of chapter on **Veterinary Laboratory Service**)

## **5. Before proceeding to the suspect holding**

### **5.1 Standstill**

- Insist that farmer/veterinary surgeon (VS) remains on farm
- If VS has left farm, instruct him/her not to visit any other farm.
- Serve Form B notice if appropriate (see Section **8.1** below on “decision to serve”).

### **5.2 Communication**

- Notify Superintending Veterinary Inspector or Regional Superintending Veterinary Inspector of suspect report.

### **5.3 Information**

Gather as much relevant information as possible, e.g.

- Number and species of animal on farm
- Number and species of animal showing suspect lesions
- Whether there is a phone on the farm
- Location of suspect(s) (home or out-farm)
- Means of restraint on out-farm

### **5.4 Equipment: ‘first case’ scenario**

Ensure you have the following:

- Exotic Diseases ‘Yellow Pack’ [containing the report forms – Telephone Report Form (**Annex 1**), Suspect Premises Report Form, Article 19 notice and Forms A and B]
- Protocols – Biosecurity (**Annex 2**), Clinical examination (**Annex 3**), Measures to be taken on Suspect Premises (**Annexes 4**), Flow Diagram for Suspect (**Annex 5**)
- Protective clothing as per list in Biosecurity Protocol
- Bucket, brush and disinfectant
- Mobile phone

#### **Additional equipment for ‘escalating’ scenario**

- Rompun (+ syringes and needles) to sedate animals for sampling
- Sampling protocol (Appendices 7A and 7B of chapter on **Veterinary Laboratory Service**)
- Epithelium - two virus containers
- Milk – Sterile Universal bottles of 25 ml capacity
- Whole blood – 7 mls in lithium-heparin anticoagulant bottles
- Clotted sample – 7 mls evacuated blood tubes with identity labels, as issued for Brucellosis sampling

## 5.5 Assistance and security

- Ask a TAO to accompany you to the holding
- The TAO is responsible for ensuring that nothing and nobody leaves or enters the holding until the outcome of the investigation is known.

### **MAKE EVERY EFFORT TO GET TO A SUSPECT HOLDING:**

- **WITHIN 2 HOURS IN A 'FIRST CASE' SCENARIO**
- **WITHIN 1 HOUR IN AN 'ESCALATING' SCENARIO**

## 6. Procedures to be followed on the holding

### 6.1 Biosecurity

Follow the Biosecurity Protocol given in **Annex 2**.

### 6.2 Clinical examination

- (a) Carry out the clinical examination according to the protocol given in **Annex 3**.
- (b) If, in a 'first case' scenario, the results of the clinical examination of the animals **cannot rule out FMD**, the DVO SVI should be consulted and then an RO from the RVL should be called. .
- (c) RVLs are equipped with full sampling kits. RVLs are responsible for the taking, packaging and transporting samples to the National Reference Laboratory.
- (d) The RO is also responsible for notifying the NDCC that samples have been taken.
- (e) In a 'worst case scenario', the VI will assume the role of the RO. He/she will discuss their findings with the NDCC. The NDCC will direct whether or not to take samples. The protocol for sampling is laid down in Appendix 7A and 7B of the chapter on **Veterinary Laboratory Service**.

### 6.3 Outcome of the investigation

- (a) In a "first case" scenario there are four possible outcomes to the investigation:
  - The VI is able to rule out FMD
  - The VI calls an RO for a second opinion, which rules out FMD
  - The VI calls an RO for a second opinion. The RO cannot rule out FMD and takes samples for dispatch to the National Reference Laboratory
  - The VI calls an RO for a second opinion. The RO suspects FMD and takes samples for dispatch to the National Reference Laboratory
- (b) In an 'escalating' scenario the VI will determine, after discussion with the NDCC, one of two possible outcomes
  - FMD can be ruled out

- FMD is confirmed on clinical grounds (samples may or may not be requested, depending on the resources available and the urgency of the situation)

## 6.4 Documentation

### (a) Restriction Notice

Depending on the outcome of the clinical examination, the relevant restriction notice should be served, as indicated in the Flow Diagram for Suspect FMD in **Annex 5**:

- No notice (FMD has been ruled out and no samples taken)
- **Form B** (FMD cannot be ruled out and samples have been taken)
- **Form B and Form A** (FMD is suspected; Form A may only be served after consultation with the NDCC)

The conditions imposed by the restriction notice **must** be brought to the attention of the farmer.

### (b) Report Forms

An epidemiological investigation into the possible source and potential spread of the disease is initiated by completing the following forms:

- **Telephone Report Form (Annex 1)** in all cases
- **Suspect Report Form** (See chapter on **Forms**) if samples have been taken

## 6.5 Census and movement controls from the holding

- (a) Article 4 of Council Directive 2003/85/EC requires that a census of all animals on the premises be taken, and that restrictions on the movement of everything listed in **Annex 4** be maintained until FMD can be ruled out.
- (b) Additional lists of compulsory and supplementary measures outlined in Articles 4 to 9 of Council Directive 2003/85/EC are also included in **Annex 4**. The NDCC will decide on the extent of the measures to be applied.

## 7. Reporting the suspect to the NDCC

- 7.1** All reports of suspect FMD, whatever the outcome, must be communicated to the NDCC on the **FMD-R Form** (see section on **NDCC**).
- 7.2** A **reference number** will be given over the phone (e.g. FMD-R 2002/0001) – where **R** refers to report.
- 7.3** The information listed on the **Telephone Report Form** should be telephoned to the NDCC as soon as it is available:

‘Peacetime’ phone numbers: **01 6072678, 6072602, 6072338, 6072294, 6072732 or 6072562**

New contact numbers for the Suspect/Traces Section of the NDCC will be circulated to DVOs/LDCCs when an outbreak has been confirmed in Ireland.

- 7.4 Copies of the following forms must be **faxed** to the NDCC as soon as possible:
- **Form B** or **Form A**
  - **Suspect FMD Report Form**

Fax number: **01 678 7360**

## **8. Serving Form A, B and AA**

### **8.1 Decision to serve Form A or Form B**

- (a) If the investigating RO **strongly suspects** FMD is on a holding, the VI must serve a **Form B** on the herd owner.
- (b) In addition, the NDCC will decide whether immediate movement controls within a 5-mile (8 km) radius should be imposed.
- (c) If 8km radius movement controls are imposed the NDCC will ask the SVI (or a VI) from the local DVO to give the **Form A** to the local Garda Superintendent.
- (d) No additional national legislation by way of Statutory Instrument is required.
- (e) The Form A restrictions automatically lapse after 48 hours unless extended by a further notice under Article 7.1 of the FMD Order.
- (f) The restricted area may be extended outwards to a radius of 15 miles (24 km) by serving a further notice under Article 7.2 of the FMD Order, if considered necessary.

### **3.1 Action required by local DVO after serving Form A or B**

- (a) Inform the local Garda Superintendent by phone
- (b) Give the original of the Form A to the local Garda Superintendent **by hand**, and **fax** a copy to the Director of Services (Environment) of the Local Authority and the NDCC.
- (c) Inform the Local Authority Veterinary Inspector by phone so that relevant staff can be put on alert
- (d) In conjunction with the Garda Superintendent, arrange for VI/TAO staff to assist in checks at the limits of the 8 km zone.
- (e) Ensure that none of the following are moved **out of** the area:
  - Animals
  - Carcasses
  - Semen, embryos, ova
  - Milk
- (f) Transport of the above **through** the area may be **permitted if the transport is on a main road**.

### **3.2 Serving Form AA – Where a control area has been established in Northern Ireland, and extends in part across the border**

- (a) If FMD is strongly suspected in Northern Ireland on a holding which is close to the border with Ireland, and a notice equivalent to Form A has been served

by the Department of Agriculture and Rural Development in Northern Ireland, a **Form AA** must be served. The SVI/VI must consult the NDCC before serving this form.

- (b) Form AA applies the same controls as Form A above to the part of the 8 km area, which is located south of the border.
- (c) The notice should be given to the local Garda Superintendent **by hand** and copies **faxed** to the Director of Services (Environment) of the Local Authority and the NDCC, as for Form A above, and the same action as above should follow.

## 9. Actions to be taken while awaiting test results

- 9.1 Preliminary results of the virus antigen ELISA test should become available within 24 hours. If the result of the antigen ELISA test is negative samples must be further tested using the virus isolation test. This will take between two and four days.
- 9.2 If FMD is strongly suspected, it is vital that procedures that are required to be in place once disease is confirmed are initiated. **To wait for confirmation may be too late.** In particular:
  - The VI on the “suspect” holding must identify a suitable **location to slaughter** animals on the holding and the resources necessary to carry this out.
  - The SVI at the DVO must make tentative arrangements to carry out slaughter.
  - The DVO must undertake a **census** estimate of susceptible species within a radius of 3 km and 10 km of the suspect holding, using CMMS (cattle), NPITS (pigs) and NSIS (sheep) databases. This information must be available to the NDCC **within 48 hours of confirmation** of disease.
  - The VI on the holding must identify any **dangerous contact premises**:
    - a) contiguous holdings
    - b) holdings which have received animals that could have been incubating disease
    - c) holdings visited by personnel who had contact with the ‘suspect’ animals.
  - Contiguous cattle herds can be determined within minutes from the **Contiguous Herds** facility on the e-zone at the LDCC
  - A map of the index and contiguous herds can be generated using the **Herdfinder** programme (available in each DVO)
- 9.3 Depending on the scenario at the time, the NDCC will direct whether any of the following are to be carried out:
  - slaughter of the ‘suspect’ animals
  - slaughter of the ‘suspects’ and any ‘in-contact’ animals
  - slaughter of animals on the ‘suspect holding’ and dangerous contact holdings
- 9.4 When a decision to slaughter has been made, the policy will be to:
  - slaughter “suspect” and “in-contact” animals on the **suspect premises within 24 hours** of notification

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- slaughter “**dangerous contacts**” within **48 hours** of notification

## **10. Summary of procedures**

A summary of procedures following a suspicion of FMD is in **Annex 7**.



**Are any / all affected animals housed:** **Yes / No**

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**Type of Enterprise: Dairy / Suckler / Beef / Mixed  
Pig / Sheep / Other  
Mixed Species**

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**CONTACT to other outbreak:** **Yes / No / Unknown**  
**(if yes, complete below)**

**Name & Short Address**

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**TYPE OF CONTACT**

**Direct contact (Animal – Human – Vehicles – Other)**

**Contiguous (to I.P.) Contiguous (To Out Farms of IP)**

**Dangerous contact Other contact**

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**DECISION**

**Declare Infected Premises YES / NO**

**Signed:** \_\_\_\_\_

**Date Time**

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## ANNEX 2

### Hygiene Protocol for RVL/DVO staff visiting suspect premises

#### **-1. The Vehicle**

- (a) Ensure that the exterior and interior of your vehicle are clean prior to departure. Remove all extraneous equipment and rubbish from the vehicle.
- (b) 'Clean' and 'dirty' areas of your vehicle must be established –e.g. back seat 'clean', boot of vehicle 'dirty'. If your vehicle has both these areas within the same airspace (e.g. estate or jeep) designate areas of the vehicle furthest apart.
- (c) Cover both 'clean' and 'dirty' areas with disposable plastic sheets.
- (d) Cover the driver *and* passenger seat and foot well of the vehicle in a similar fashion (in case you have to travel to farm fragments with passengers).
- (e) Before leaving ensure your vehicle contains sufficient of the items in **LIST 1**.

#### **LIST 1.**

- Personal protective clothing (waterproofs, waterproof sou'wester/hat, disposable (Tyvek) over-suits, over-boots, gloves, wellingtons, tight fitting facemasks)
  - Water container + water supply
  - Disinfectant (see list of Approved Disinfectants)
  - Equipment required for job (e.g. sampling, culling, thermometers, sharps container)
  - Mobile phone (**charged**) in zip-locked double plastic bags
  - Autoclavable bags and ties for transport/disposal of clothing/equipment
  - Brushes and buckets for disinfection purposes
  - Large clean plastic sheets
  - Change of ordinary clothes in a clean plastic bag
  - Notebook (disinfectable) and pencils
- (f) Store all clean/unused equipment (suits, sampling gear etc) in the 'clean' area.
  - (g) **Do not move anything from the 'dirty' area to the 'clean' area of the vehicle.**
  - (h) On return to the RVL / DVO clean and disinfect the interior of the vehicle paying particular attention to personal contact points (i.e. steering wheel, foot pedals) and the 'dirty' area. Use a power hose or car wash to clean the exterior of the vehicle.

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### 2. *The Person*

- (a) You will be dressed in normal clothes – therefore personal protective clothing **must** be worn on the farm (**LIST 2**).

#### **LIST 2.**

- Disposable (Tyvek) over-suit (legs inside wellingtons)
- Wellingtons
- Waterproof suit – keep waterproof trouser legs over wellingtons
- Extra over-suit outside waterproof one (legs outside wellingtons)
- Waterproof hat (sou'wester)
- Over-boots outside wellingtons
- Gloves (double gloves to be worn, bring extra supply onto farm)
- Face mask, tight fitting
- Ear protection if pig farm

### 3. *Procedure for ENTRY ONTO a premises*

- (a) Park the **vehicle** at a suitable point (disinfection point) near the entrance to the farm premises. **Do not drive into the yard.**
- (b) **Take** onto the farm only what is required for your visit –**going back to the vehicle will require a complete change of clothing if no one is available outside the farm.**
- (c) Remove any **outer clothing and take only essential items** (e.g. leave keys, wallet, rings etc. in the car.)
- (d) Put on **protective clothing (LIST 2)** over normal clothes.
- (e) Spread a clean plastic sheet on the ground at a **CLEAN POINT outside the farm gate** for changing when leaving the farm (secure with something heavy e.g. stones).
- (f) **Leave** your water supply and sufficient disinfectant, bucket, brush, autoclavable bags, change of shoes/clothes etc. at this point.
- (g) Just **inside the farm gate** (farm side) place a bucket, disinfectant, water (if not available on farm) and a supply of clean autoclavable bags & ties to disinfect and package anything that has to be taken off farm.

### 4. *Procedure for EXIT FROM a premises*

- (a) It is important to take off the farm as few potentially infected items as possible. Therefore **leave** what you can with the farmer for safe disposal by burning – **not** for inclusion with domestic waste.

ANNEX 2

- (b) **Inside the farm gate**, where you left the bucket, disinfectant and bags, disinfect all equipment/items that require to be taken off farm (0.2% citric acid is useful for this purpose).
- (c) Place all **consumables** used on the farm in one of the autoclavable bags and seal. Sharps should be placed in the sharps container you brought onto the farm. LEAVE bags and sharps container on the farm if possible. If this is not possible thoroughly disinfect the outside of these items prior to removal off farm to your designated 'clean point'.
- (d) Also disinfect the outside of the bag that held the **mobile phone**.
- (e) Discard your first layer of **protective clothing** at the farm side of the farm gate in the following order: over-boots, outer over-suit, facemask, gloves (outer pair) Place these in an autoclavable bag, seal and **leave behind with the farmer** for disposal. If this is not possible thoroughly disinfect the outside of the bag prior to removal off farm to your designated 'clean point'.
- (f) Proceed to your clean point outside the farm gate. **Only move cleaned and disinfected gear onto it**. Disinfect your waterproof clothing and wellingtons completely (pay particular attention to soles of wellingtons) using plenty of disinfectant and a brush.
- (g) Remove cleaned **wellingtons** and place in a clean leak-proof plastic bag and secure.
- (h) Remove **waterproof clothing** (including sou'wester/hat) and immerse in disinfectant in a bucket. Place in clean leak-proof bag and secure.
- (i) Wash and disinfect **hands, arms and face** paying special attention to fingernails.
- (j) **Disinfect** 'clean area' plastic sheet. Place in an autoclavable bag and seal it.
- (k) Remove remaining **over-suit**, (if possible change clothes), put on shoes. Place all discarded items in a clean autoclavable bag and seal.
- (l) Finally wash and disinfect your **hands** again.
- (m) Proceed to the **vehicle**. To avoid contamination of the vehicle's interior, ensure that everything that you have taken off the farm is secured in sealed leak-proof plastic bags. Place in the 'dirty' area of the vehicle.
- (n) Arrange to hand over the laboratory **samples** to a 'clean' person at designated location (it is advisable NOT to return to the RVL / DVO prior to showering and having a complete change of clothes).

- (o) If you **do not own susceptible animals** return home directly, change clothes and shower as below.
- (p) If you **do own susceptible animals** proceed to a B&B or some other suitable place, shower and change clothes.
- (q) Safely dispose of **disposable equipment** and decontaminate **protective clothing** by autoclaving if possible.
- (r) Disinfect **car and other equipment** as per code of practice RVL/DVO.
- (s) Decontaminate **personal clothes** by autoclaving (115°C for 30mins) followed by laundering - hot wash (80°C standard detergent wash). **NB Dry cleaning will not inactivate the FMD virus.**
- (t) **Shower** thoroughly; pay special attention to fingernails and hair.
- (u) **Do not attend susceptible animals** for a minimum of 3 days.

## ANNEX 3

### CLINICAL EXAMINATION

1. The suspect animal(s) and the immediate contacts must be examined.
2. Details of the following are contained in the chapter on **Veterinary Laboratory Service** and in each 'Yellow Pack':
  - Clinical signs of FMD
  - Differential diagnoses of FMD
  - Ageing of lesions
3. The animal may be moved to a suitable location for restraint – **only** if in so doing, no other stock is likely to be exposed to infection.
4. It may be preferable to restrain the animal in a temporary pen (Farm Relief Services may be able to supply these).
5. It may be necessary to tranquillise animals that are difficult to handle using Rompun, with the consent of the owner.
6. Where FMD is suspected or cannot be ruled out in a 'first case' scenario, the VI should contact the DVO SVI and request the presence of an RO, who will be responsible for taking, packaging and transport of samples, and for notifying the NDCC of the details (see chapter on **Veterinary Laboratory service**).
7. In an 'escalating' scenario, in which new outbreaks are being reported/confirmed in 'clean country' the investigating VI will be issued with a sampling kit before investigating each suspect report. During the course of the investigation the V.I. must contact the NDCC. Following consultation and discussion, the VI will proceed with the collection of the appropriate samples if directed – whole blood, serum, milk and tissue samples (epithelium).
8. If feasible, **all other stock** should also be clinically inspected, taking suitable hygiene precautions, before making a report. This is especially important where the initial history indicates that the **suspected animals may not be the primary cases** on the farm.
9. However, this inspection may be deferred if the numbers or locations of the other animals mean that this is likely to cause an unacceptable delay in reporting.

## ANNEX 4

<b>MEASURES TO BE TAKEN ON SUSPECT PREMISES A. 4, 5 &amp; 9 of Council Directive (2003/85/EC)</b>	
<b>Suspect Premises</b>	
Census of animals of susceptible species	All categories showing dead, sick and healthy – updated daily with mortalities and births
Census of products	Record of all stocks of milk, milk products, meat, meat products, carcasses, hides, skins, wool, semen, ova, embryos, slurry, manure, feed, litter – updated as necessary
Susceptible species (ruminants & swine)	Prohibited from moving <u>to or from</u> the holding kept in living quarters or isolated
Other species	Prohibited from moving <u>to or from</u> the holding unless under permit
Meat or carcasses, milk products, semen, ova or embryos of animals of susceptible species or animal feed, utensils, objects or other substance, such as wool, hides and skins, bristles or animal waste, slurry, manure or anything liable to transmit foot-and-mouth disease virus;	Prohibited from leaving the holding
Milk	Prohibited from leaving the holding Destruction on the premises <u>may</u> be authorised Competent authority <u>may</u> authorise the removal under official supervision in suitable equipped transport to nearest place for destruction
Persons	Prohibited from moving <u>to or from</u> the holding unless under permit
Vehicles	Prohibited from moving <u>to or from</u> the holding unless under permit
Disinfection	At entry and exit to holding and each animal house
Epidemiological enquiry	Time of introduction of virus, possible origin, contact premises, movements of persons, vehicles and substances to or from the premises
<b>Measures to be maintained until FMD ruled out</b>	

<b>SUPPLEMENTARY MEASURES THAT MAY BE TAKEN</b> <b>A. 6 - 8 of Council Directive (2003/85/EC)</b>	
Contiguous herds/contacts	The Competent Authority <u>shall</u> extend the control measures to other holdings where their location, their construction and layout, or contacts with animals from the suspect holding indicate a risk
Temporary control zone (Form A restrictions)	The Competent Authority <u>shall</u> impose these measures in a surrounding area where required by the epidemiological situation especially if a) high density area b) intensive movements of animals/people c) delay in notification or d) insufficient information to identify source
National standstill	Temporary control zone <u>may</u> be supplemented by a temporary ban on movements in a larger area or the whole country for up to 72 hours
Preventive culling	Preventive slaughter of holding +/- contact holdings <u>may</u> be carried out if indicated by epidemiological information or other evidence but must inform the Commission beforehand + ensure clinical & serological sampling as per Annex III of draft amended Directive

**ANNEX 5 FLOW DIAGRAM FOR SUSPECT FMD REPORTS ('first case' scenario)**

