

6. Depopulation

Date of depopulation: 11 August 2000
Method of depopulation: Killing on the holding followed by destruction at a rendering plant

7. **Presumed date of infection:** 27 June 2000

8. **Date of preliminary cleansing and disinfection:** 11 August 2000

9. Epidemiology

Tracing back: Source of infection probably infected weaned pigs supplied by Case SF00/02 on 27 July

Animal contacts: Deliveries of weaned pigs from 6 breeders on 26,27,28 and 30 June including from SF00/02.

Transport contacts: Feed lorries on 11,20,28,31 July

Personnel: Company field staff on 2,6,12 June; 3,7,14,19,25,27 July: 1 and 4 August. Veterinary surgeon on 7 July and 3 August MAFF on 7 August

Tracing on: Collection dead pigs on 17 June, 27 July and 2,4 August. No live animal movements off the premises after 26 June

10. Zone report

1 km radius of infected holding: No of holdings with pigs: 0

Protection Zone: Established 9 August
No of holdings with pigs: 4

Surveillance Zone: Established 9 August
No of holdings with pigs: 60

11. **Local measures:** As provided for in Directive 80/217

DETAILED REPORT ON CLASSICAL SWINE FEVER

6.4 OUTBREAK SF00/04

1. Location

District: Rumburgh,
County: Suffolk
MAFF AHDO: Bury St Edmunds

2. Type and Size of Farm

Total No. of pigs: 2574
No of breeding pigs: 0
No of rearing pigs: 2574
No. of fattening pigs: 0

3. Suspicion of disease

Date of suspicion: 8 August 2000
Reported by whom: Company veterinary surgeon

No of sick/dead pigs: 609
No healthy pigs: 1965

Clinical signs: lethargy, yellow diarrhoea, inco-ordination, fever, excessive thirst, cyanosis of skin particularly ears and abdomen

Samples taken: tonsil, spleen, maxillary lymph node, mesenteric lymph node, spleen and ileum from 3 dead pigs. Clotted blood samples from 6 live, in contact pigs.

4. Method of diagnosis

FAT on cryostat tissue sections
Virus isolation on tissue culture with discriminatory typing using monoclonal antibodies.
ELISA serology

5. **Date of confirmation of disease:** 12 August 2000

6. Depopulation

Date of depopulation: 12 August 2000
Method of depopulation: Killing on the holding followed by destruction at a rendering plant

7. **Presumed date of infection:** 17 July 2000

8. **Date of preliminary cleansing and disinfection:** 13 August 2000

9. Epidemiology

Tracing back: Source of infection probably infected weaned pigs supplied by Case SF00/02 on 17 July

Animal contacts: Deliveries of weaned pigs from 6 breeders on 26 June; 17,21,24,26 and 28 July including from SF00/02.

Transport contacts: Feed lorries on 1 and 10 August

Personnel: Company field staff on 12,26,27 June; 26,28 July and 1 August. Veterinary surgeon on 27 June and 3 August MAFF on 9 August

Tracing on: Collection dead pigs on 26 June and 7 July. No live animal movements off the premises after 17 July

10. Zone report

1 km radius of infected holding: No of holdings with pigs: 1
No/type of pigs: 481 fatteners

Protection Zone: Established 12 August
No of holdings with pigs: 13

Surveillance Zone: Established 12 August
No of holdings with pigs: 174

11. **Local measures:** As provided for in Directive 80/217

DETAILED REPORT ON CLASSICAL SWINE FEVER

6.5 OUTBREAK SF00/05

1. Location

District: Harlesdon,
County: Norfolk
MAFF AHDO: Bury St Edmunds

2. Type and Size of Farm

Total No. of pigs: 833
No of breeding pigs: 0
No of rearing pigs: 833
No. of fattening pigs: 0

3. Suspicion of disease

Date of suspicion: 9 August 2000
Reported by whom: Company veterinary surgeon

No of sick/dead pigs: 520
No healthy pigs: 313

Clinical signs: lethargy, yellow diarrhoea, inco-ordination, fever, excessive thirst, cyanosis of skin particularly ears and abdomen

Samples taken: tonsil, spleen, maxillary lymph node, mesenteric lymph node, spleen and ileum from 3 dead pigs. Clotted blood samples from 6 live, in contact pigs.

4. Method of diagnosis

FAT on cryostat tissue sections
Virus isolation on tissue culture with discriminatory typing using monoclonal antibodies.
ELISA serology

5. **Date of confirmation of disease:** 12 August 2000

6. Depopulation

Date of depopulation: 11 August 2000
Method of depopulation: Killing on the holding followed by destruction at a rendering plant

7. **Presumed date of infection:** 4 July 2000

8. **Date of preliminary cleansing and disinfection:** 13 August 2000

9. Epidemiology

Tracing back: Source of infection probably infected weaned pigs supplied by Case SF00/02 on 4 July

Animal contacts: Deliveries of weaned pigs from 4 breeders on 3,4,5 and 6 July.

Transport contacts: Feed lorries on 15 July and 3 August

Personnel: Company field staff on 13 June; 6, 10, 24 and 28 July
Veterinary surgeon on 18 and 24 July; 7 August MAFF on 9 August

Tracing on: Knackerman on 8 August
No live animal movements off the premises after 3 July

10. Zone report

1 km radius of infected holding: No of holdings with pigs: 2
No/type of pigs: 1 holding with 3950 rearers
and 1 holding with 14 fatteners.

Protection Zone: Established 12 August
No of holdings with pigs: 12

Surveillance Zone: Established 9 August
No of holdings with pigs: 180

11. **Local measures:** As provided for in Directive 80/217

CLASSICAL SWINE FEVER IN GREAT BRITAIN 2000

REPORT NO 3

4 SEPTEMBER 2000

Ministry of Agriculture, Fisheries and Food
4 September 2000

DETAILED REPORT ON CLASSICAL SWINE FEVER

OUTBREAK 2000/06

1. Location

Parish: Topcroft
County: Norfolk
MAFF AHDO: Bury St Edmunds

2. Type and Size of Farm

Total No Pigs: 1037 rearing pigs (age approximately 10-12 weeks)
Indoor unit: Rearing unit purchasing piglets at 4 weeks and rearing to store size. Operates an all-in all-out policy

3. Suspicion of Disease

Date of Suspicion: 31/08/00
Reported by Whom: MAFF Veterinary Officer - Surveillance Visit
No of sick/dead pig: 50
No of healthy pigs 987
Clinical signs: Coughing, respiratory distress, cyanotic, yellow pallor of the skin, inco-ordination. Spots and scabs on heads and legs. Temp 106-8°F.
Post mortem signs: Petechial haemorrhages in the kidneys, bladder, enlarged spleen, pneumonia.

History

SF00/06 was placed under official veterinary control on 17 August as a consequence of a tracing back from SF00/05 after disease was confirmed there on 12 August. On 17 August, there was no evidence of CSF on SF00/06 and 59 blood samples were taken at random for CSF antibody testing. Tests for CSF antibodies were all negative and the farm was released from official control on 27 August.

SF00/06 is within the surveillance zone established around SF00/05 and is located approximately 3.3 km from the infected holding. A MAFF VO visited SF00/06 on 31 August in the course of a surveillance visit before the surveillance zone could be lifted. At the visit, the VO found 50 sick pigs out of 1037.

Samples Taken:

Tonsil, spleen, submandibular lymph node, kidney, ileum, mesenteric lymph node from 4 pigs. EDTA bloods from 6 pigs for virus isolation plus 14 clotted samples for serology.

4. Method of Diagnosis

FAT on cryostat tissue sections
Virus isolation on tissue culture with discriminatory typing using monoclonals
PCR
ELISA serology

5. **Date of confirmation of disease:** 4 September 2000

6. **Presumed date of infection:** 1 August 2000

7. **Date of depopulation:** 6 September

8. Epidemiology

Tracing back: 3 breeding herds supplying weaned pigs

Tracing off: 1 finishing herd

Personnel: Owner drives for a haulage company that has transported pigs for SF00/04. Owner having contact with SF/20000/4 on 1 August.

Fieldsman visited on 28 July having visited SF00/05 on 24 July.

Investigations into other direct and indirect contacts are continuing.

Location of CSF Outbreak in Great Britain

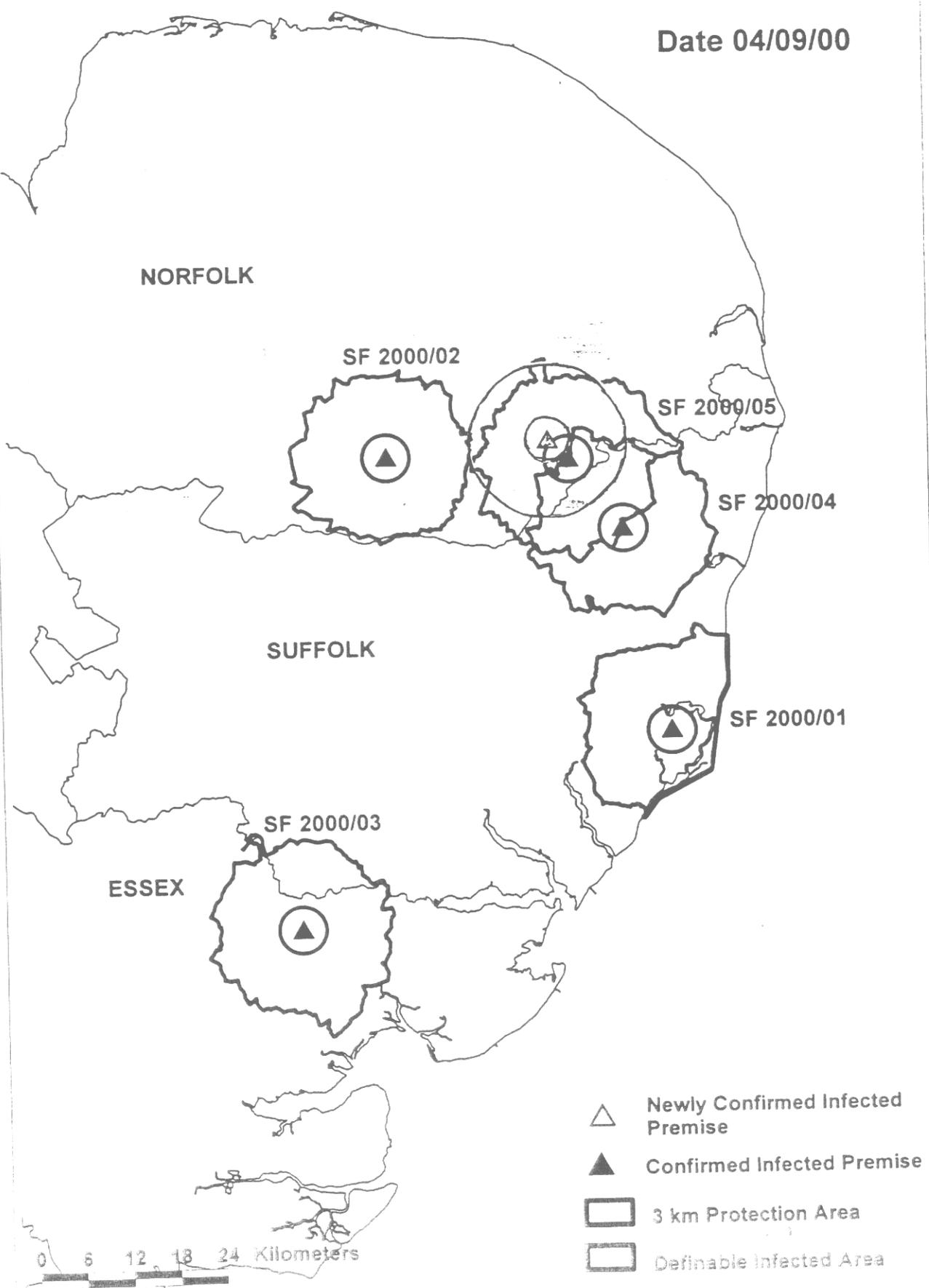
Date 04/09/00



Kilometers
0 25 50 75 100

Location of Infected Areas and 3 km Protection Zones in East Anglia

Date 04/09/00



CLASSICAL SWINE FEVER IN GREAT BRITAIN 2000

REPORT NO 4

1 October 2000

Ministry of Agriculture, Fisheries and Food
1 October 2000

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1. SUMMARY

1.1 As of 1 October 2000, Classical Swine Fever (CSF) has been confirmed on 14 premises in Great Britain, one (1) in Essex, six (6) in Suffolk and seven (7) in Norfolk.

1.2 3-km and 10-km protection and surveillance zones have been established around each of the 14 confirmed outbreaks. The protection and surveillance zones around outbreak SF 00/03 in Essex were lifted on 22 September.

1.3 Epidemiological investigations suggest that infection was introduced in early June to the primary outbreak (SF 00/02), a breeding unit in Norfolk. Thereafter, infection appears to have spread to 4 rearing premises (SF 00/01, SF 00/03, SF 00/04 and SF 00/05) in the same breeding pyramid through the movement of infected weaned pigs. Lateral spread appears to have taken place from one of these holdings (SF 00/01) to two neighbouring holdings (SF 00/07 and SF 00/09) and from SF 00/07 to three other holdings (SF 00/08, SF 00/10 and SF 00/11) through the movement of infected pigs. An origin for outbreaks SF 00/06, SF 00/12, SF 00/13 and SF 00/14 has yet to be determined. However, their proximity to other infected holdings and the fact that all have occurred in infected areas established on or before 12 August, suggests that infection may have been introduced by the movement of people, vehicles etc., rather than the movement of pigs.

1.4 The nucleic acid sequences of the viruses so far isolated from the outbreaks appear to be identical suggesting that all have been caused by the same virus. Epidemiological investigations have failed to identify the origins of the virus and the exact route of its introduction with certainty but it is possible the source could have been contaminated pig meat contained in edible products discarded by people who used public footpaths that ran adjacent to outdoor paddocks in which breeding sows were).

2. CHRONOLOGY AND LEGAL MEASURES

DATE	ACTION AND INTRODUCTION OF LEGAL MEASURES
04.08.00	Suspect CSF reported on a rearing premises in Suffolk. Samples to VLA and IAH Pirbright for CSF and ASW diagnosis. Holding placed under official veterinary control
07.08.00	Suspect CSF reported from a rearing premises in Essex and a breeding premises in Norfolk. Samples to VLA and IAH Pirbright for CSF and ASW diagnosis. Holdings placed under official veterinary control. Internal stop placed on issuing export certificates for porcine germplasm.
08.08.00	<p>CSF confirmed on rearing premises in Suffolk (Outbreak Ref. SF00/01).</p> <p>Suspect CSF reported on a rearing premises in Suffolk. Samples to VLA and IAH Pirbright for CSF and ASW diagnosis. Holdings placed under official veterinary control</p> <p>The Swine Fever Declaratory Order 2000/2153 made imposing 3/10 km protection and surveillance zones around infected premises SF00/01 and banning movement of all livestock on to /off premises where pigs are kept, transporting any material (feedingstuff, manure, slurry etc) likely to be contaminated with CSF except under licence, movement of any vehicle for transporting pigs or other livestock except under licence and holding markets, fairs etc for pigs. In addition, owners of premises where pigs are dead or diseased must report the same to MAFF</p>
09.08.00	<p>CSF confirmed on breeding premises in Norfolk (Outbreak Ref.. No SF00/02) and rearing premises in Essex (Outbreak Ref.. No SF00/03).</p> <p>Further suspect CSF reported from a rearing premises in Norfolk. Samples to VLA and IAH Pirbright for CSF and ASW diagnosis. Holdings placed under official veterinary control</p> <p>The Swine Fever Declaratory (No 1) and (No 2) Orders 2000/2178 and 2000/2179 made imposing 3 and 10 km protection and surveillance zones around infected premises SF00/02 and SF00/03.</p> <p>All third country live pig export certificates offering country freedom from CSF and porcine germplasm export certificates placed "on hold" while SVS HQ review certificates offering country freedom from CSF.</p> <p>Customer Information Note CIN 2000/26 on exports of live pigs and porcine products issued to livestock producers.</p> <p>From ANIMO messages, and certificate numbers, identified live pig consignments originating from in the restricted areas and extracted details of destination of consignments.</p> <p>Confirmed no AI Centres in restricted zones.</p>

DATE	ACTION AND INTRODUCTION OF LEGAL MEASURES
10.08.00	Pigs on holding SF00/01 destroyed Copy of CIN 2000/26 placed on MAFF Website and ANIMO banner message placed on CENTAUR
11.08.00	Pigs on holdings SF00/03 and SF00/05 destroyed Preliminary Cleansing and disinfection on holding SF00/01 and SF00/03. Customer Information Note CIN 2000/28) on exports of porcine germ plasm issued to exporters
12.08.00	CSF confirmed on rearing premises in Suffolk (Outbreak Ref. SF00/04) and Norfolk (Outbreak Ref. SF00/05) The Swine Fever Declaratory (No 3) and (No 4) Orders 2000/2200 and 2000/2201 made imposing 3 and 10 km protection and surveillance zones around infected premises SF00/04 and SF00/05. Pigs on holding SF/00/04 destroyed.
13.08.00	Preliminary cleansing and disinfection on holdings SF00/04 and SF00/05
14.08.00	Commission Decision 2000/515 banning live pig exports from England Customer Information Note CIN 2000/30 issued to exporters
15.08.00	Pigs on holding SF00/02 destroyed All exporters of porcine semen with health certificates issued in the past 40 days telephoned and advised of Decision 2000/515
16.08.00	Preliminary cleansing and disinfection on holding SF00/02
17.08.00	CIN 2000/28 put on MAFF Website. CENTAUR banner info on porcine semen prepared.
22.08.00	Commission Decision 2000/528 approved by the SVC amending Decision 2000/515 and restricting the prohibiting on the export of live pigs and porcine semen from England to Suffolk, Norfolk and Essex
23.08.00	CIN 2000/33 and AHC 2000/83 notified industry organisations and SVS staff of the action to be taken following adoption of Decision 2000/515/EC. The Swine Fever Declaratory (Amendment) Order 2000/2209 and The Swine Fever Declaratory (Amendment)(No 1) Order 2000/2224 made amending The Swine Fever Declaratory Order 2000/2153 and Declaratory (No 2), (No 3) and No 4) Orders 2000/2178, 2200 and 2201) and reducing the size of the surveillance zones around outbreaks SF00/01, SF00/03, SF00/04 and SF00/05 to 10-km
24.08.00	The Swine Fever Declaratory (Amendment)(No2) Order 2000/2297 made making minor adjustments to the boundary of the infected area around SF00/01. Examination of pig holdings in the Surveillance zones around outbreaks SF00/01 and SF00/03 begins prior to lifting zone restrictions

DATE	ACTION AND INTRODUCTION OF LEGAL MEASURES
25.08.00	The Animals and Animal Products (Import and Export)(England and Wales)(Amendment) Order 2000/2266 made implementing Commission Decision 2000/528/EC
29.08.00	Examination of pig holdings in the Surveillance zones around outbreaks SF00/04 and SF00/05 begins prior to lifting zone restrictions
30.08.00	The Swine Fever Declaratory (Amendment) (No3) Order 2000/2325 made reducing the size of the protection zone around outbreak SF00/02
03.09.00	Examination of pig holdings in the Surveillance zones around outbreaks SF00/02 begins prior to lifting zone restrictions
04.09.00	The Swine Fever Declaratory Order (No5) 2000/2308 made imposing 3-km and 10-km protection and surveillance zones around outbreak SF 00/06
05.09.00	The Swine Fever Declaratory Order (No6) 2000/2309 made imposing 3-km and 10-km protection and surveillance zones around outbreak SF 00/07
08.09.00	The Swine Fever (Movement Restriction Areas) Order 2000/2394 and The Swine Fever (Movement Restriction Areas) Declaratory Order 2000/2411 made creating the power to declare movement restrictions around a holding suspected to be infected with CSF and declaring 7 Movement Restriction Areas.
10.09.00	The Swine Fever Declaratory Order (No7) 2000/2428 and The Swine Fever Declaratory Order (No 8) 2000/2429 made imposing 3-km and 10-km protection and surveillance zones around outbreaks SF 00/08 and SF 00/09
12.09.00	The Swine Fever (Movement Restriction Areas)(Amendment) Order 2000/2640 made amending Order 2000/2394 and permitting the movement of animals to be licensed. The Swine Fever Declaratory (Amendment)(No 4) 2000/2461 revoking Orders 2000/2153, 2309, 2428 and 2411 and re-made with amendments to 5 Movement Restriction Areas. The Swine Fever Declaratory (No 9) Order 2000/2462 made imposing 3-km and 10-km protection and surveillance zones around outbreak SF 00/10
13.09.00	The Swine Fever Declaratory Order (No 10) 2000/2505 made imposing 3-km and 10-km protection and surveillance zones around outbreak SF 00/11
14.09.00	Animals and Animal Products (Import and Export)(England and Wales)(Amendment)(No 1) Order 2000/2524 made implementing Commission Decision 2000/542/EC. The Swine Fever Declaratory (Amendment)(No 5) Order 2000/2525 made amending Order 2000/2461 to revoke certain Movement Restriction Areas

DATE	ACTION AND INTRODUCTION OF LEGAL MEASURES
18.09.00	The Swine Fever (Movement Restriction Areas) Declaratory (No 1) Order 2000/2536 made creating new Movement Restriction Areas.
20.09.00	The Swine Fever Declaratory (Amendment)(No 6) Order 2000/2561 made amending Order 2000/2461 to revoke certain Movement Restriction Areas.
21.09.00	The Swine Fever Declaratory (Amendment)(No 7) Order 2000/2565 made amending Order 2000/2461 to revoke certain Movement Restriction Areas.
22.09.00	The Swine Fever Declaratory (Amendment)(No 8) Order 2000/2589 made revoking Order 2000/2178 and lifting restrictions around SF 00/03
26.09.00	The Swine Fever Declaratory (Amendment)(No 9) Order 2000/2644 made amending the infected area created by Order 2000/
29.09.00	The Swine Fever Declaratory (Amendment)(No 10) Order 2000/ made revoking Order 2000/

3. DEVELOPMENTS SINCE THE REPORT NO 3 OF 4 SEPTEMBER 2000

3.1 Outbreaks of Classical Swine Fever

3.1.2 A further eight (8) outbreaks of Classical Swine Fever (CSF) have been confirmed in Great Britain since the last report on 4 September. The total number of CSF outbreaks confirmed now stands at fourteen (14). The first outbreak (SF00/01) was confirmed on 8 August 2000, the last outbreak (SF00/14) was confirmed on 26 September 2000

3.1.3 Epidemiological investigations suggest that infection was introduced in early June to the primary outbreak (SF 00/02), a breeding unit in Norfolk. Thereafter, infection appears to have spread to 4 rearing premises (SF 00/01, SF 00/03, SF 00/04 and SF 00/05) in the same breeding pyramid through the movement of infected weaned pigs. Lateral spread appears to have taken place from one of these holdings (SF 00/01) to two neighbouring holdings (SF 00/07 and SF 00/09) and from SF 00/07 to three other holdings (SF 00/08, SF 00/10 and SF 00/11) through the movement of infected pigs.

3.1.4 This leaves four holdings (SF 00/06, SF 00/12, SF 00/13 and SF 00/14) for which an origin has yet to be determined. However, their proximity to other infected holdings and the fact that all have occurred in infected areas established on or before 12 August, suggests that infection may have been introduced by the movement of people, vehicles etc., the movement of pigs onto and off holdings in these areas having been prohibited after that date.

3.1.5 With the exception of SF 00/03 in Essex, all the holdings on which CSF has been confirmed are in Suffolk and Norfolk. The infected area in Essex was lifted on 22 September.

3.2 Virology

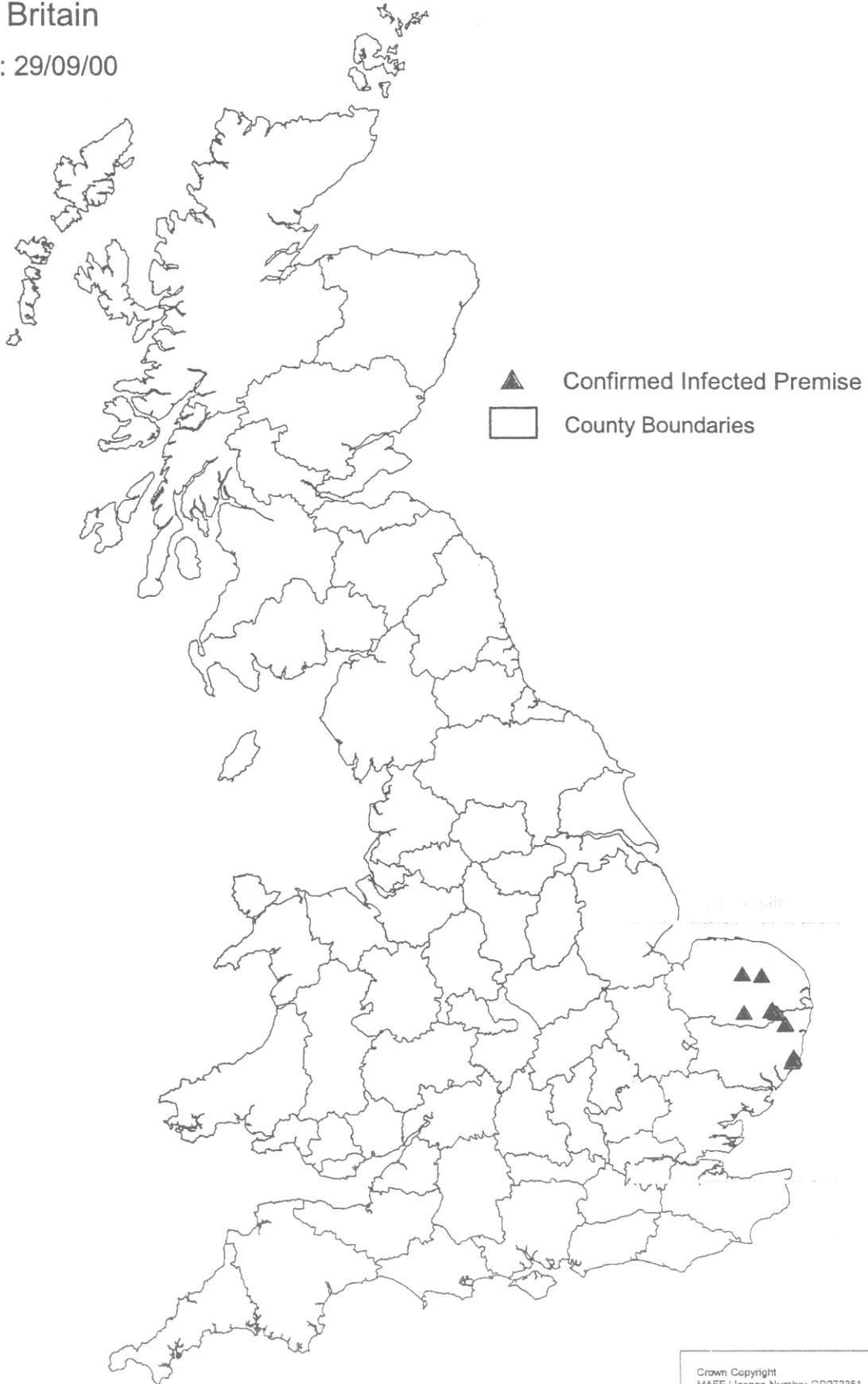
3.2.1 Scientists at the Veterinary Laboratories Agency (VLA) Weybridge have continued to sequence the E2 glycoprotein gene of the viruses obtained from all 14 outbreaks. Results so far show that the nucleic acid sequences of all the viral isolates are identical. This coupled with information obtained from the ongoing epidemiological inquiries into all 14 outbreaks suggests they have all been caused by the same virus.

3.3 Origins and source of infection

3.3.1 Epidemiological investigations have failed to identify the origins of the virus and the exact route of its introduction with certainty but it is possible the source could have been contaminated pig meat contained in edible products discarded by people who used public footpaths that ran adjacent to outdoor paddocks in which breeding sows were held (see Report No 2, Section 4).

Location of CSF Outbreak in Great Britain

Date: 29/09/00

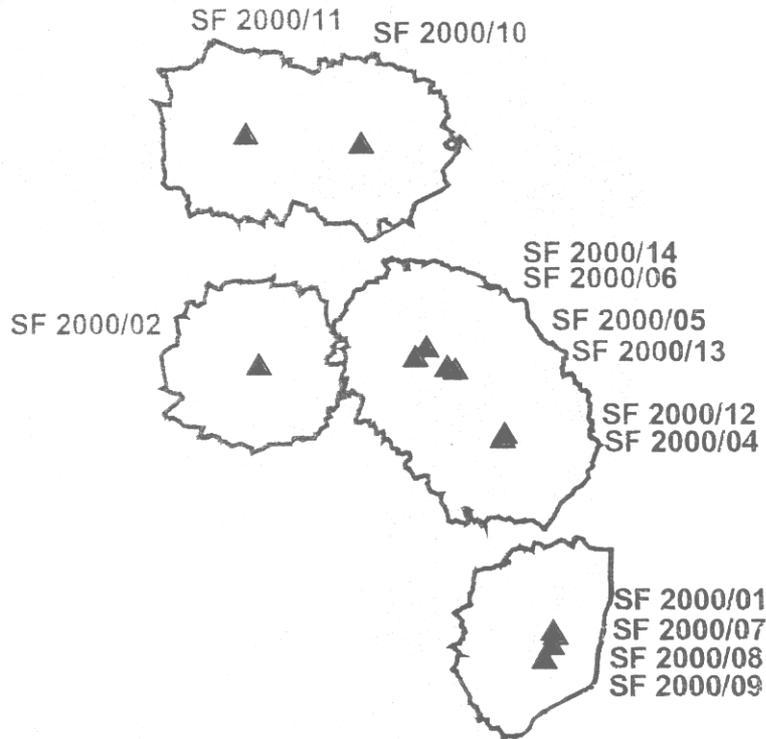


40 0 40 80 Kilometers

Crown Copyright
MAFF Licence Number GD272361

Location of Infected Areas in East Anglia

Date: 29/09/00



	Confirmed Infected Premise
	Definable Infected Area

5 0 5 10 15 20 Kilometers

Crown Copyright
MAFF Licence Number GD272361

3.4 Measures taken to control the outbreak

Imposition of protection and surveillance zones following confirmation of disease

3.4.1 Following confirmation of disease on the 14 holdings, the measures foreseen in Council Directive 80/217 have been applied (see Section 2). Protection and surveillance zones have been established around each infected holding. The movement of all livestock on to and off premises where pigs were kept has been prohibited as has the transport of any material (feedingstuff, manure, slurry etc) likely to be contaminated with CSF except under licence, the movement of any vehicle for transporting pigs or other livestock except under licence and the holding of markets, fairs etc for pigs.

3.4.2 As outbreaks have been confirmed, surveillance zones have been merged. Currently, there are four (4) surveillance zones in operation (see Figure 2). Zone 1 contains 4 infected premises (SF00/01, SF 00/07, SF 00/08 and SF 00/09), Zone 2 contains 6 infected holdings (SF 00/04, SF 00/05, SF 00/06, SF 00/12, S 00/13 and SF 00/14), Zone 3 contains one (1) infected holding (SF 00/02) and Zone 4 contains 2 infected holdings (SF 00/10 and SF 00/11). A fifth Zone surrounding SF 00/03 was lifted on 22 September.

Imposition of additional area movement restrictions

3.4.3 On 8 September additional legislative powers were taken (The Swine Fever (Movement Restriction Areas) Order 2000) to prohibit the movement of pigs within a 10 km radius of a holding considered to be at a high risk from CSF because of contact with a confirmed outbreak, while investigations were undertaken to determine whether or not CSF was present on holdings. Nine (9) such notices have been served of which

- (i) two (2) have been removed and replaced with formal notices declaring premises to be infected with CSF and imposing 3-km and 10-km protection zones around each holding (SF 00/11 and SF 00/10);
- (ii) one (1) remains in place (MR 2000/08); and
- (iii) six (6) have been lifted

Investigation of suspect outbreaks of disease

3.4.4 Suspected outbreaks of CSF must be officially notified to the MAFF. Following notification, the suspect holding is visited by an official veterinary surgeon. If he/she believes disease may be present, the holding is placed under official veterinary control (Form A restrictions) and tissue and blood samples are taken to determine whether or not disease is present. While the investigation takes place, the holding is placed under official veterinary control and movements onto and off the holding are prohibited. Since the start of the outbreak, 171 holdings have been placed under official veterinary control

because of suspect CSF. Official controls have been lifted on 99 holdings and disease has been confirmed on 14 holdings. A total of 58 holdings remain under official control pending the outcome of investigations.

Tracing the movement of pigs, vehicles and people onto and off infected holdings

3.4.5 Following confirmation of disease, the movement of livestock, vehicles and people onto and off the holding are traced to identify the origin and spread of disease. Holdings containing pigs identified by these tracing are investigated and if disease is present which is suspicious of CSF, the holding is placed under official veterinary control and an investigation carried out to determine whether or not disease is present (see paragraph 3.3.4). Even if there is no evidence of disease, the holding is placed under official control (Form B restrictions) and no pigs may leave the premises except under licence. Pigs on the holding are subject to serological examination for evidence of CSF that is not carried out until 21 days after the suspected contact with the infected holding. To date, 367 holdings have been placed under official control (Form B restrictions) as a result of tracings from a CSF infected holding.

Preventive killing of pigs at risk from CSF

3.4.5 All the pigs on holdings within a 1-km radius of an infected holding are killed and destroyed unless there is a good veterinary reason for not doing so. Blood samples from pigs on these holdings are sent to the VLA for serological and virological examination to determine whether or not disease was present on the holding. Where there is evidence of disease suspicious of CSF, tissue samples from suspect pigs are also examined.

3.4.6 Where MAFF veterinary staff consider there is a high risk that a holding may be infected with CSF, e.g. because the holding is contiguous with an infected holding or because the holding may have received pigs from an infected holding at a time when infection was present on the farm, all the pigs on the holding are destroyed and tests are carried out to determine whether or not disease is present. To date, 24 holdings have been depopulated for this reason.

3.5 Controls in the surveillance zones

3.5.1 As provided for in Article 9(7) of Council Directive 80/217, the controls imposed within a surveillance zone must apply (a) until cleansing and disinfection of the infected premises has been completed, (b) the pigs on all holdings in the zone have undergone a clinical examination and been found to have no signs of disease suggestive of CSF and (c) serological examinations have been carried out on a representative sample of holdings in the zone and have failed to reveal any antibodies to CSF virus. These examinations may not take place until 15 days has elapsed after completion of preliminary cleansing and disinfection measures on the infected holding.

3.5.2 These controls have been rigorously enforced. Since the start of the outbreak on 8 August, the movement of live pigs off all holdings located within the protection and surveillance zones has been prohibited except where pigs have been authorised to enter the Pig Welfare Disposal Scheme. These movement controls have been supplemented by additional movement controls imposed on holdings outwith existing surveillance zones through the imposition of Movement Restriction Orders (see Paragraph 3.3.3).

3.6 Lifting protection and surveillance zones

3.6.1 The dates on which preliminary cleansing and disinfection was completed on the fourteen (14) infected holdings and the dates on which the measures foreseen in Directive 80/217 can be applied in respect of the surveillance zones are shown in Table 1.

Table 1: Dates on which preliminary cleansing and disinfection was completed on CSF infected holdings and on which preparatory work for lifting controls on the protection and surveillance zones may commence

CSF Infected Holding	Date Preliminary Cleansing and Disinfection completed on the infected holding	Date work may start preparatory to lifting the surveillance zone	Date work may start preparatory to lifting the protection zone	Estimated date on which controls on the surveillance zones may be lifted
SF00/01	12 August	27 August	11 September	11 September
SF00/02	19 August	3 September	18 September	18 September
SF00/03	12 August	27 August	Surveillance and protection zones lifted on 22 September	
SF00/04	14 August	29 August	13 September	13 September
SF00/05	14 August	29 August	13 September	13 September
SF 00/06	08 September	23 September	09 October	09 October
SF 00/07	15 September	30 September	16 October	16 October
SF 00/08	14 September	29 September	14 October	14 October
SF 00/09	27 September	12 October	18 October	18 October
SF 00/10	14 September	29 September	14 October	14 October
SF 00/11	20 September	05 October	20 October	20 October
SF 00/12	18 September	3 October	19 October	19 October
SF 00/13				
SF 00/14				

3.6.2 On 26 August, instructions were issued to MAFF veterinary staff to start the work necessary to lift controls in the surveillance zones in line with the timetable foreseen in Table 1.

3.6.3 Outbreak SF 00/03 in Essex was confirmed on 9 August. The holding was depopulated on 11 August and preliminary cleansing and disinfection was completed on 12 August. As provided for in Articles 9(5) and 9(7) of Council Directive 80/217/EEC, measures to lift the protection and surveillance zones commenced on 27 August (surveillance zone) and 11 September (protection zone), these being 15 days and 30 days respectively after preliminary cleansing and disinfection had been completed on the infected holding.

3.6.4 In respect of the protection zone, all the measures laid down in Article 10 of Decision 80/217 were carried out and the pigs on all holdings underwent clinical and serological examinations without revealing evidence of signs of disease suggestive of CSF or without the detection of antibodies to CSF.

3.6.5 As regards the surveillance zone, all the measures laid down in Article 10 of Directive 80/217 were carried out and all holdings with breeding pigs were visited and all the pigs on the holding were clinically inspected. A statistical sample of the pigs was clinically examined, including the taking of temperatures, and bled for CSF serology. The size of the sample was that required to detect a 5% prevalence of CSF infection with a 95% confidence in each epidemiological unit on the holding. All holdings with rearing/finishing pigs were visited and all the pigs were clinically inspected. On 60% of these holdings, a statistical sample of pigs was clinically examined, including the taking of temperatures, and bled for CSF serology. The size of the sample was that required to detect a 20% prevalence with 95% confidence in each epidemiological unit on the holding. On no holding was there clinical evidence of CSF and all the laboratory results were negative for CSF.

3.6.6 In addition, between 19 and 21 September, all pigs in the surveillance zone were clinically inspected for a second time. On each holding a statistical sample of pigs was also clinically examined and their temperatures recorded. The results of this further round of clinical inspections and examinations failed to reveal any evidence of disease suggestive of CSF.

3.6.7 The protection and surveillance zones surrounding outbreak SF 00/03 were lifted on 22 September and the EU Commission so informed.

3.7 Pig Welfare (Disposal) Scheme

3.7.1 On 29 August, and after discussion with the Commission, a Pig Welfare (Disposal) Scheme (PWDS) was introduced for owners of pigs which have been under CSF movement restrictions for more than two weeks (see Report No 2, Section 3). The purpose of the scheme is to deal with severe welfare problems by removing pigs and arranging for them to be killed in a dedicated, unlicensed abattoir. Carcasses are destroyed by rendering. The transport, killing and disposal costs of the PWDS are born by MAFF and farmers receive a payment for each pig entering the scheme.

3.7.2 Since the last Report, payments to farmers have been revised. They are now £10 for each pig up to 45kg weight, £30 for each pig 45kg-100kg weight and £50 (plus an additional £15 per pig from an industry levy fund which is being set up) for each pig over 100kg weight.

3.7.3 The scheme is now attracting overweight pigs, in particular boars which would have a low value because their meat would be heavily tainted. As of 28 September, 126

holdings had offered pigs to the PWDS and 31,556 pigs had been slaughtered, including a small number of 45kg pigs and sows.

4. EPIDEMIOLOGICAL INVESTIGATION

4.1 Introduction and spread of infection - overview

4.1.1 Epidemiological investigations carried out to date suggest that infection was introduced in early June to the primary outbreak (SF 00/02), a breeding unit in Norfolk. Thereafter, infection appears to have spread to 4 rearing premises (SF 00/01, SF 00/03, SF 00/04 and SF 00/05) in the same breeding pyramid through the movement of infected weaned pigs. Lateral spread appears to have taken place from one of these holdings (SF 00/01) to two neighbouring holdings (SF 00/07 and SF 00/09) and from SF 00/07 to three other holdings (SF 00/08, SF 00/10 and SF 00/11) through the movement of infected pigs.

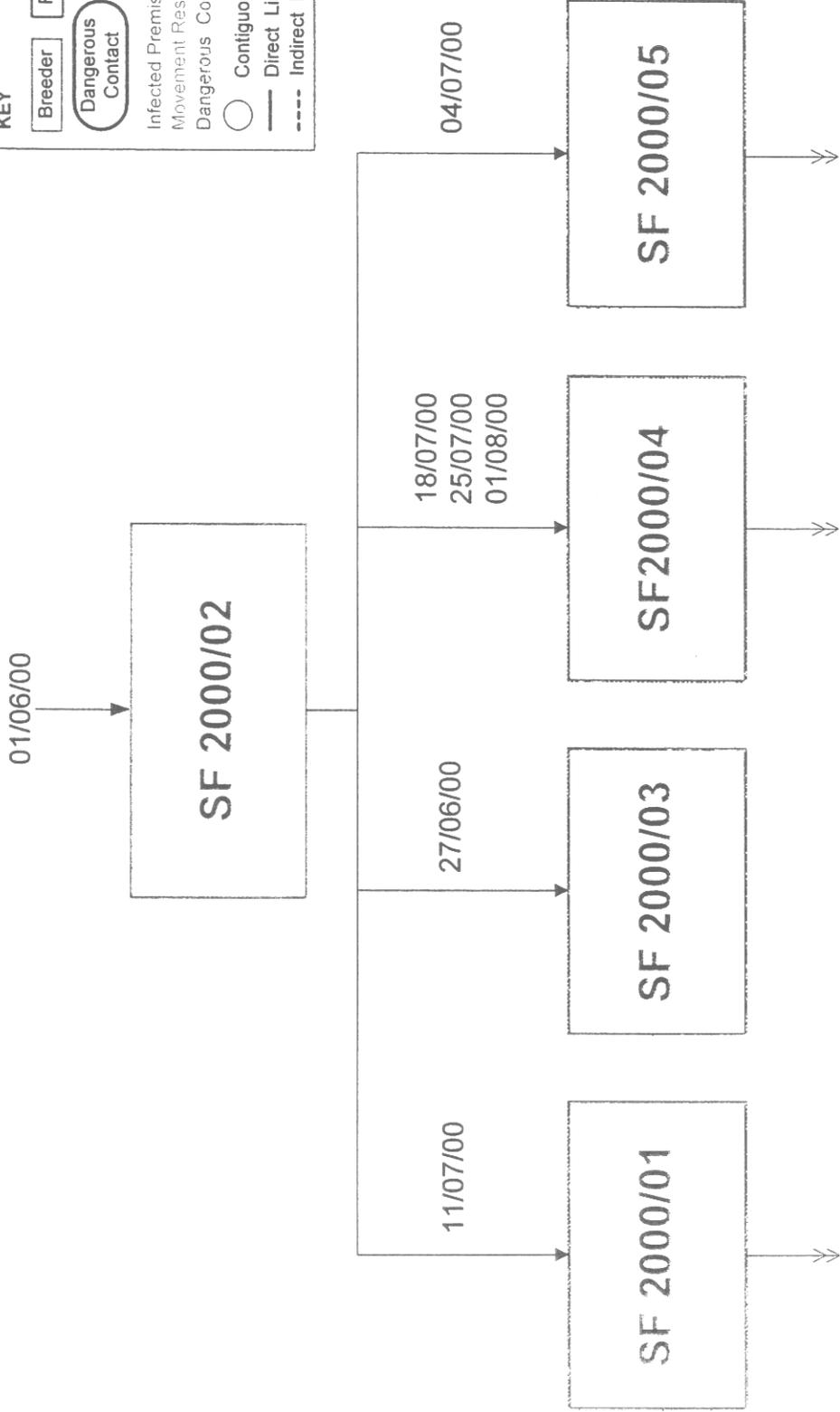
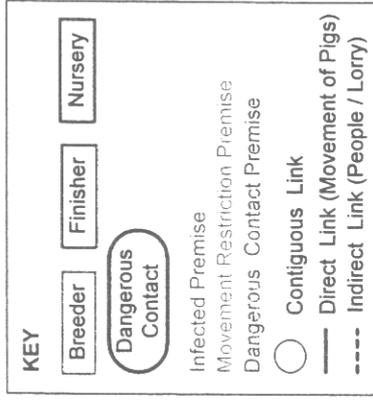
4.1.2 This leaves four holdings (SF 00/06, SF 00/12, SF 00/13 and SF 00/14) for which an origin has yet to be determined. However, their proximity to other infected holdings and the fact that all have occurred in infected areas established on or before 12 August, suggests that infection may have been introduced by the movement of people, vehicles etc., the movement of pigs onto and off holdings in these areas having been prohibited after that date.

4.2 Introduction and spread of infection to the primary group – SF 00/01 to SF 00/05 (Figure 1)

4.2.1 The introduction and spread of infection to this group of holdings has been discussed in previous reports. Infection is believed to have entered a breeding herd (SF 00/02) in early June 2000, possibly following exposure of mid to late gestation sows and gilts to infected pork product. Premises SF00/01, SF 00/033, SF 00/04 and SF 00/05 received infected weaners from this herd between 27 June and 1 August. All pigs on these premises were destroyed; primary cleansing and disinfection was completed for these five premises by 22 August 2000. Extensive tracing of pig, vehicle and personnel movement was carried out for all premises and those identified as being at risk have been placed under official veterinary controls while pigs on the holdings are examined for the presence of disease.

4.2.2 These examinations and those associated with protection and surveillance zone restrictions lead to the confirmation of CSF on one further holding (SF00/06) in the surveillance zone established on 12 August around SF04. Protection and surveillance zones established around these infected holdings remain in place, with the exception of that around SF 00/03 which was lifted on 22 September (see paragraph 3.5)

FIGURE 1



4.3 Introduction and spread of infection to the secondary group – SF 00/07 to SF 00/11 inclusive (Figures 2 and 3)

4.3.1 Holdings SF 00/07, SF 00/08 and SF 00/09 are contiguous with each other, and /or with premises SF01. This is an area of extensive woodland, game birds and fox activity. Epidemiological investigations suggest infection entered these holdings in the last week of July or first week of August, when infection was present on SF 00/01 but had not yet been identified. This premises is believed to have been the source of infection for the 5 holdings in this second group.

4.3.2 The normal method of carcase disposal at SF 00/01 was storage in lidded bins that were emptied weekly by a contractor (knacker man).). These bins could hold about 5 weaner pigs but during the week commencing 25 July, 162 pigs died. These were stacked beside the bins awaiting collection and were partly covered by a tarpaulin. The contractor's records indicate that both bins were full and in addition to the 10 pigs in the bins, 130 carcasses were collected from the ground. It is possible that the missing carcasses were scavenged by foxes. The viruses recovered from these 5 premises have an identical E2 nucleic acid sequence to each other and the first five cases, indicating they have a common origin. It is therefore possible that the outdoor pigs on premises SF 00/07, SF 00/08 and SF 00/09 were exposed via wildlife vector (fox) to virus from the missing carcasses. As the risk of lateral spread appeared high, depopulation of all pig holdings within the 3-km surveillance zone established around SF 00/01, SF 00/07, SF 00/08 and SF 00/09 was undertaken.

4.3.3 Extensive tracing of pig, vehicle and personnel movement was carried out and premises identified as being at risk have been restricted and examined for the presence of disease. These examinations and those associated with protection and surveillance zone restrictions lead to the confirmation of CSF on a further two premises (SF 00/10 and SF 00/11). SF00/07 supplied weaners to SF 00/10, a nursery farm, on 8 August, and replacement breeding stock to SF 00/11, a breeding farm, on both 17 July and 8 August

4.3.4 All pigs on these premises have been destroyed. Primary cleansing and disinfection had been completed for all of these premises by 27 September 2000

4.4 Introduction and spread of infection to the third group – SF 00/06, SF 00/12, SF 00/13 and SF 00/14 (Figures 4 and 5)

4.4.1 Holding SF 00/06: Suspected CSF was reported on this nursery unit on 31 August. Epidemiological investigations have shown that by the time of depopulation on 6 September the prevalence of seroconversion in the herd was between nil and 2%. Although the outcome of virological investigations is still awaited, it is possible that infection was introduced in mid-August or before. A specific source has not been identified. The owner of SF 00/06 drove lorries for the haulage company used to

FIGURE 2

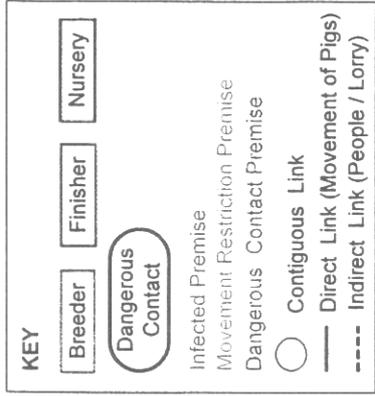


FIGURE 3

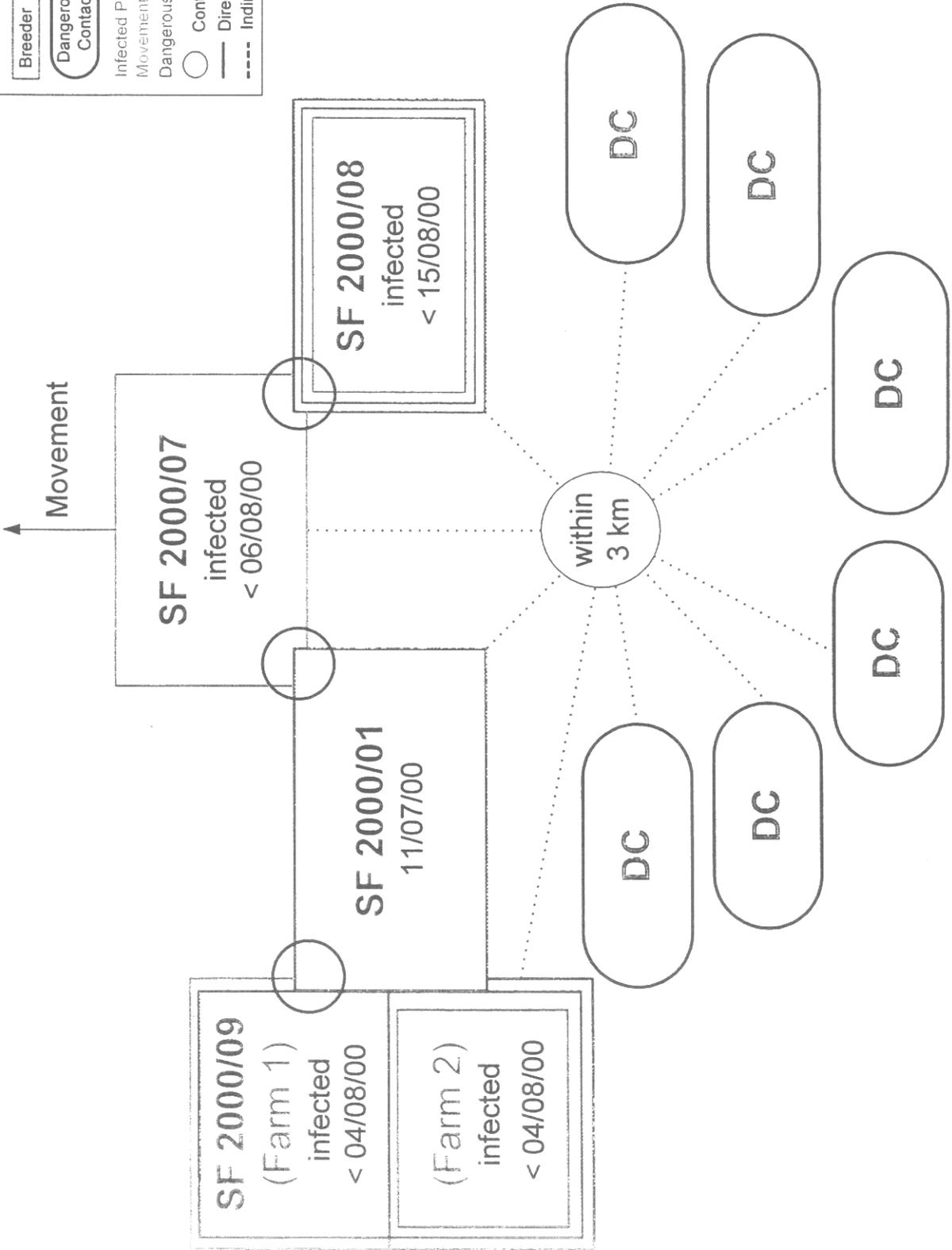


FIGURE 3

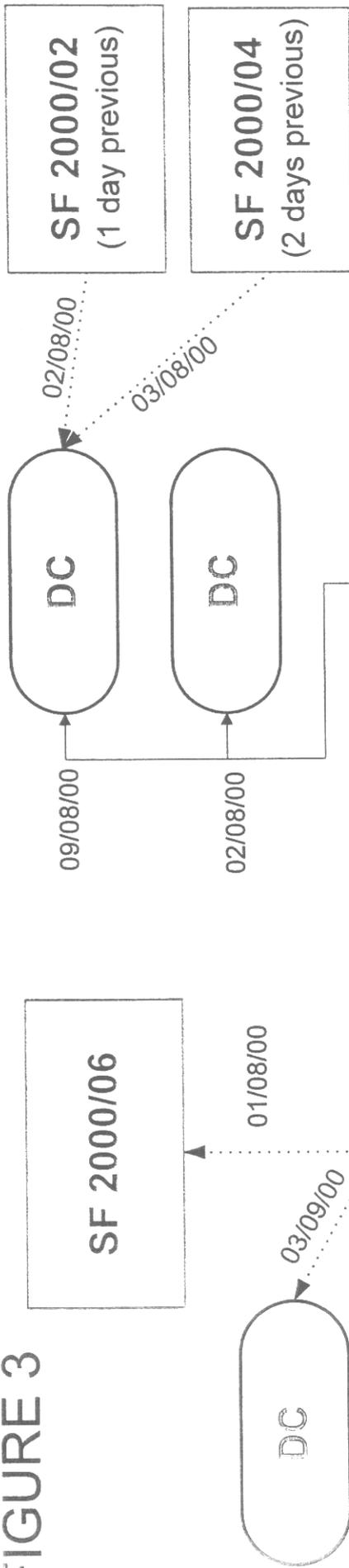
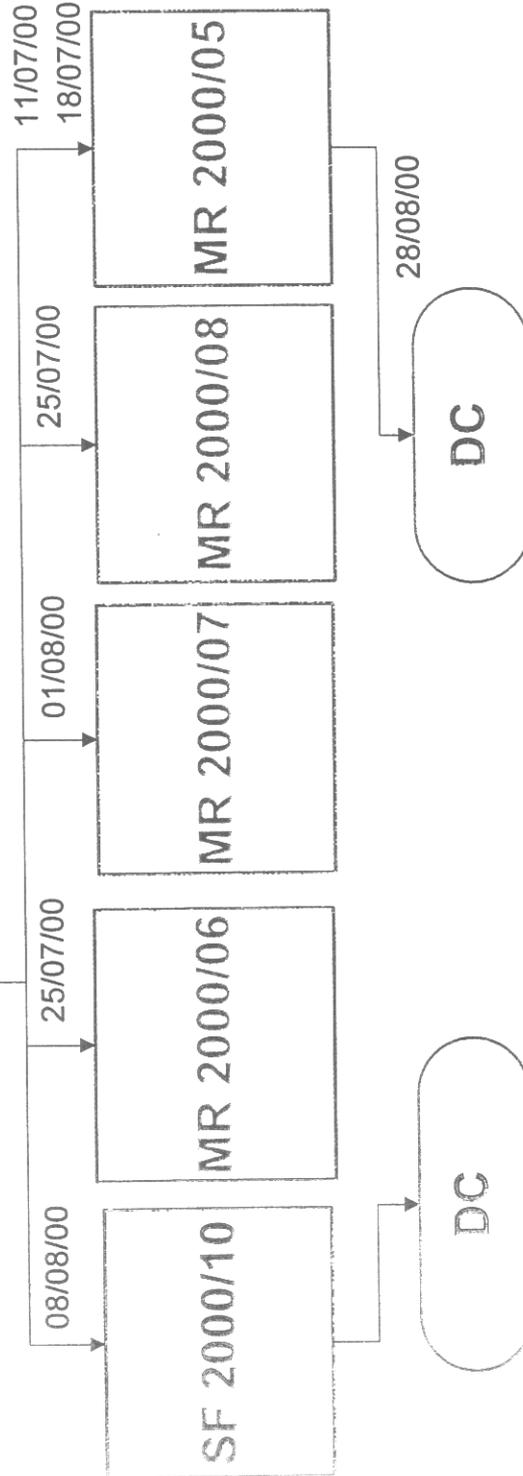
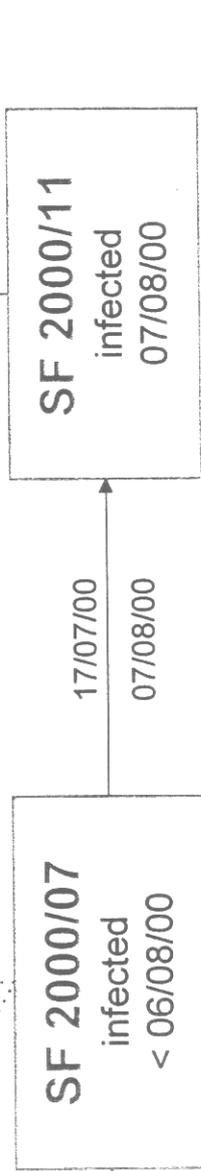


FIGURE 2



KEY

- Breeder
- Finisher
- Nursery
- Dangerous Contact
- Infected Premise
- Movement Restriction Premise
- Dangerous Contact Premise
- Contiguous Link
- Direct Link (Movement of Pigs)
- Indirect Link (People / Lorry)

transport pigs for the integrated production/breeding company to which the owners of holdings SF00/01 to SF 00/05 were contracted. People contacts have also been identified with SF 00/03, SF 00/05 and SF 00/07 and are the subject of further investigation. The premises are within the surveillance zone of SF05.

4.4.2 An all-in/all-out system operated on SF 00/06 and there had been no pig movements off the holding during the period when infection was present on the holding. Indirect contacts have been traced and investigations are in progress. The risk of neighbourhood spread is considered moderate and control measures are in place to address this. All pigs on the holding were destroyed on 6 September and preliminary cleansing and disinfection was completed on 8 September.

4.4.3 Holding SF 00/12: Suspect CSF was reported on this finishing unit on 1 September and disease was confirmed on 12 September. The holding had been investigated on 23 August as it is within 500m of SF04 but no seroconversion or illness in the pigs was detected at that visit. Epidemiological investigations have identified the building in which infection started. The group of pigs in this building had a seroprevalence of less than 5% on 23 August, of 6% on 1 September and 51% by the time of depopulation on 17 September. Thus it is likely infection was introduced not long before 24 August.

4.4.4 The owner is livestock haulier. Extensive tracings of his movements and of indirect personnel contacts to identify the source of infection continue: none has been identified to date. The proximity to SF 00/04 makes a neighbourhood contact possible. This holding was depopulated on 12 August and preliminary cleansing and disinfection was completed by 13 August.

4.4.5 Although finished pigs were sent to market each week until 9 August, investigations have confirmed that all went to slaughter, as did all other pigs with which they had contact. Indirect contacts have been traced, including all premises which the haulier visited and investigations are still in progress. Preventive depopulation of pig holdings considered at risk of infection from SF 00/12 has been carried out

4.4.6 Holding SF 00/13: Suspect CSF was reported in this indoor breeder/rearer/finisher unit (which lies in the protection zone for SF05) on 17 September. Early epidemiological investigations suggest that infection first occurred among the fattening pigs. An inspection and serological sampling to detect a 5% prevalence of infection in then herd, carried out on 16 August, as part of the protection zone surveillance around SF05, failed to detect evidence of disease. At the time of depopulation on 20 September, the low prevalence of seroconversion in the two affected groups (5% in the fat pig group, 4% in the sow group) and the absence of seroconversion in all other groups tested suggests that infection was introduced not long before 24 August.

4.4.7 Investigations suggest that the introduction of live pigs is unlikely to have been the source of infection. However, investigations are continuing and source holdings have

been placed under official veterinary control. Extensive tracings of indirect contacts are in progress but none has been identified as the source of infection to date. However the location in the neighbourhood of SF 00/05 makes local spread a possibility. This premises was depopulated on 11 August and preliminary cleansing and disinfection on SF05 was completed on 13 August.

4.4.8 SF 00/13 is a self-contained unit that sends pigs only to slaughter. Preventive depopulation has been carried out at two premises considered at risk of CSF from SF 00/13.

4.4.9 Holding SF 00/14: Suspect CSF was reported in this indoor breeder/rearer/finisher (which lies in the protection zone for SF 00/06 and the surveillance zone for SF 00/05) on 11 September. A low morbidity believed due to PDNS was present on the unit, and disease was suspected following a positive result to an ELISA test. This test formed part of the serological sampling carried out for disease surveillance in the SF 00/06 protection zone. Disease was confirmed in one of two young pigs with mild clinical signs examined post mortem. The full laboratory results of serological and virological examinations undertaken on 20 September suggest a low prevalence of seroconversion among sows and weaners, with viraemia but not seroconversion detected in the growing pigs.

4.4.10 The laboratory results suggest infection was introduced to the holding on or before 18 August. Initial epidemiological investigations suggest neighbourhood spread from SF 00/06 as the most likely source.

4.4.11 SF 00/14 is a self-contained unit that sends pigs only to slaughter. Investigation of indirect contacts is in progress. Preventive depopulation has been carried out at one premises considered at risk of CSF from SF 00/14.

FIGURE 4

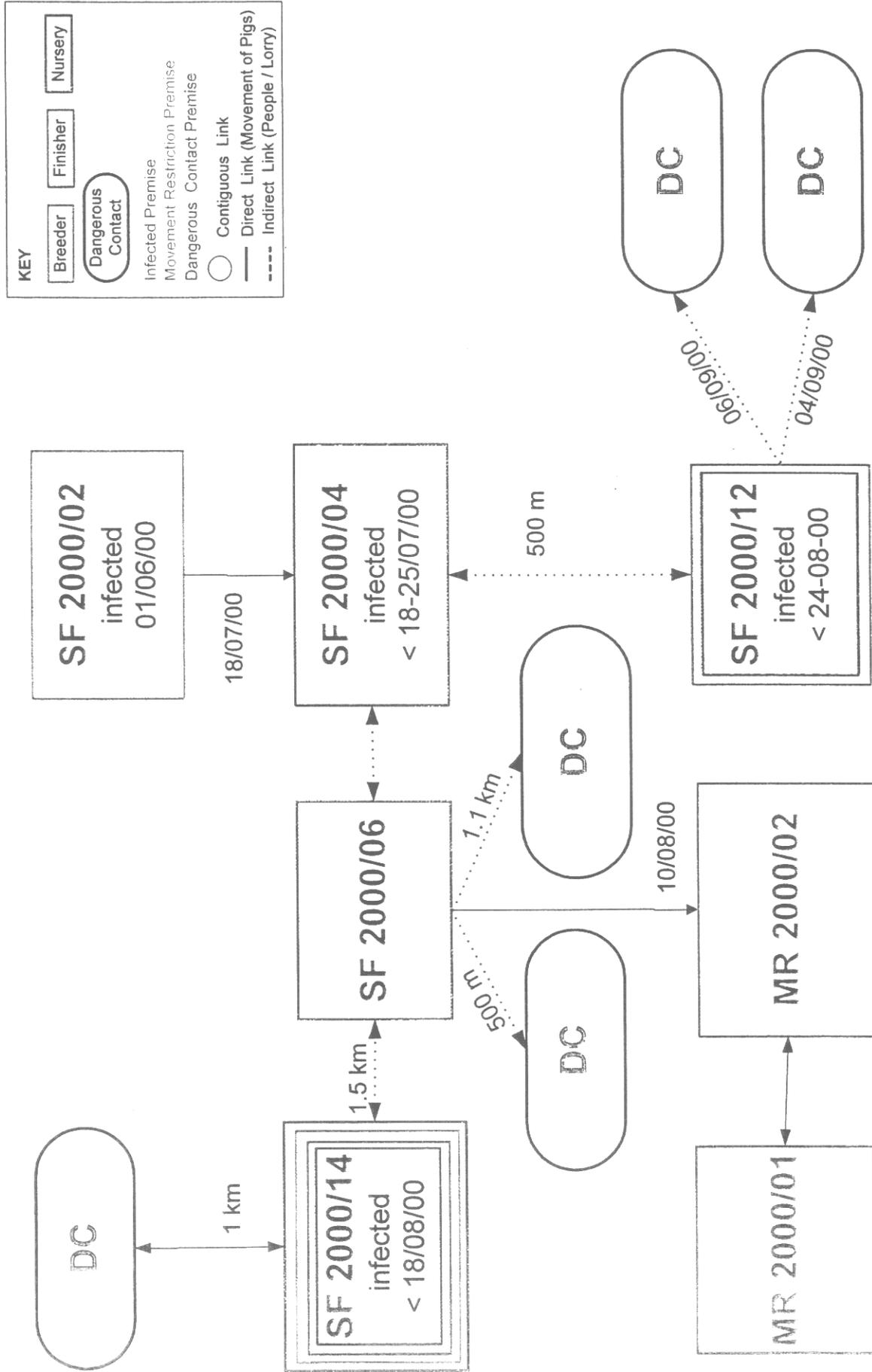
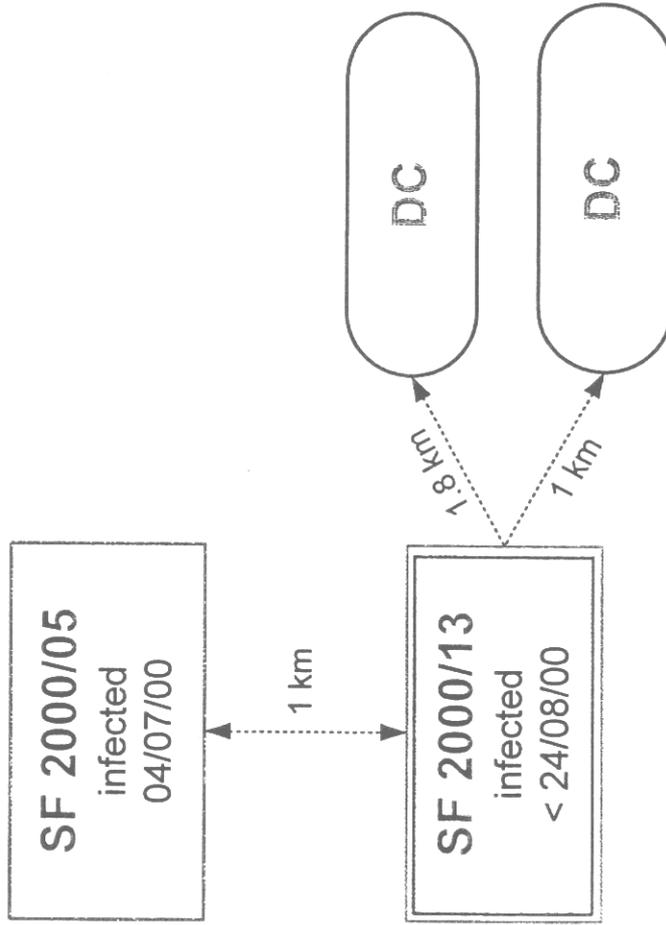
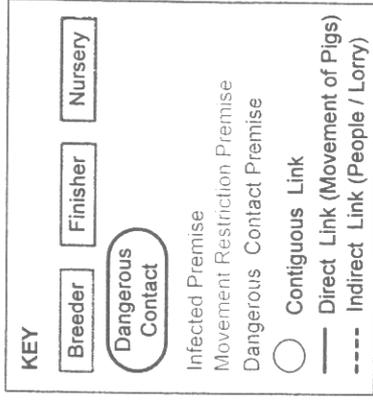


FIGURE 5



5. POSITION AS AT 1 October 2000

5.1 Confirmed outbreaks of CSF

5.1.1 CSF has been confirmed on 14 premises to 1 October 2000. Details are contained in Table 2. Detailed information regarding holdings SF 00/07 – SF 00/14 are given in Section 6. (Information on holdings SF 00/01 – 00/06 was given in Reports 1, 2 and 3)

Table 2: Number of confirmed outbreaks of CSF and their location

Outbreak No	Location	Date confirmed	Primary/ Secondary	Link	No pigs	Type
SF 00/01	Suffolk	08.08.00	Secondary	SF 00/02	3,600	B, R F
SF 00/02	Norfolk	09.08.00	Primary		1,757	B
SF 00/03	Essex	09.08.00	Secondary	SF 00/02	923	R
SF 00/04	Suffolk	12.08.00	Secondary	SF 00/02	2,574	R
SF 00/05	Norfolk	12.08.00	Secondary	SF 00/02	833	R
SF 00/06	Norfolk	04.09.00	Secondary	SF 00/01, 03, 05 or 07	1037	R
SF 00/07	Suffolk	05.09.00	Secondary	SF 00/01	3411	B, R, F
SF 00/08	Suffolk	06.09.00	Secondary	SF 00/07	4500	R, F
SF 00/09	Suffolk	10.09.00	Secondary	SF 00/01	4366	B, R, F
SF 00/10	Norfolk	10.09.00	Secondary	SF 00/07	2340	F
SF 00/11	Norfolk	12.09.00	Secondary	SF 00/07	1748	B
SF 00/12	Suffolk	13.09.00	Secondary	SF 00/04	470	Fattener
SF 00/13	Norfolk	17.09.00	Secondary	SF 00/05	4412	B, R, F
SF 00/14	Norfolk	26.09.00	Secondary	SF 00/06	1100	B, R, F

B=Breeder R=Rearer F=Fattener

5.1.2 Summary statistics relating to MAFF action since CSF was confirmed in Great Britain on 8 August upto 1 October are summarised in Table 3. From this it can be seen that:

- (i) the total number of holdings placed under official movement restrictions (Form A) because of suspected CSF has been 171. CSF has been confirmed on 14 holdings, restrictions have been lifted from 99 premises and movement restrictions remain in place on 58 holdings;
- (ii) of the 58 holdings currently under official movement controls 4 are outside the counties of Suffolk and Norfolk (1 in Derbyshire, 1 in Cambridgeshire, 1 in Somerset and 1 in Surrey). 53 are in the counties of Suffolk and Norfolk and 33 of these are in the 4 existing surveillance/protection zones. Of these, 6 are in Zone 1; 8 are in Zone 2; 15 are in Zone 3 and 4 are in Zone 4.

Table 3: Summary statistics

No. of premises placed under official movement control (Form A) since 8 August 2000	171
No. of holdings where official movement controls (Form A) have been lifted since 8 August	99
No. of holdings where CSF has been confirmed since 8 August	14
No of holdings remaining under official movement controls (Form A) at 1 October	58
Of the holdings currently under official movement controls (Form A) at 1 October	
(a) No in the surveillance zone around SF 00/01/07/08/09	6
(b) No in the surveillance zone around SF 00/02	9
(c) No in the surveillance zone around SF 00/04/05/06/12/13/14	15
(d) No in the surveillance zone around SF 00/10/11	4
Of the holdings currently under official movement controls (Form A) at 1 October	
(a) No linked by movement of pigs to a confirmed outbreak	11
(b) No linked by movement of vehicles/people etc to a confirmed outbreak	23
(c) No with no known link to a confirmed outbreak	24
Of the holdings currently under official movement controls (Form A) at 1 October	
(a) No in Norfolk and Suffolk	54
(b) No outside Norfolk and Suffolk	4
No of Movement Restriction Areas currently in force	1
No of holdings on which CSF has been confirmed	14
Total No of pigs slaughtered on holdings where CSF has been confirmed	36,015
No of holdings preventively depopulated because of a high risk of CSF	21
No of pigs destroyed on these holdings	22,941

(iii) of the 58 holdings currently under official movement restrictions, 11 are linked by the movement of live pigs to a confirmed outbreak of CSF, 23 are linked to a

- (iv) confirmed outbreak through the movement of vehicles, people etc and 24 have no known link to a confirmed outbreak;
- (v) 36,015 pigs have been killed and destroyed on the 14 holding where CSF has been;
- (vi) a further 22,941 pigs have been preventively killed and destroyed on a further 21 holdings because they were considered to be at high risk of CSF through direct contact with an infected holding:

5.1.3 The number of serological tests for CSF carried out from 8 August to 24 September is summarised in Table 4. From Table 4 it will be seen that 29,069 serological tests on pigs from 138 herds have been carried out of which 454 have been positive for CSF. These tests include tests carried out as part of investigations on holdings with suspect CSF as well as tests carried out on CSF infected herds at the time of depopulation as well as tests carried out preparatory to lifting protection and surveillance zones around infected holdings

5.1.4 The dates on which preliminary cleansing and disinfection was completed on the five (5) infected holdings and the dates on which the measures foreseen in Directive 80/217 can be applied in respect of the surveillance zones are shown in Table 1.

5.2 Summary

As of 1 October 2000:

- (i) Classical Swine Fever (CSF) has been confirmed on 14 premises in Great Britain, one (1) in Essex, six (6) in Suffolk and seven (7) in Norfolk.
- (ii) 3-km and 10-km protection and surveillance zones have been established around each of the 14 confirmed outbreaks. The protection and surveillance zones around outbreak SF 00/03 in Essex were lifted on 22 September.
- (iv) Epidemiological investigations suggest that infection was introduced in early June to the primary outbreak (SF 00/02), a breeding unit in Norfolk. Thereafter, infection appears to have spread to 4 rearing premises (SF 00/01, SF 00/03, SF 00/04 and SF 00/05) in the same breeding pyramid through the movement of infected weaned pigs. Lateral spread appears to have taken place from one of these holdings (SF 00/01) to two neighbouring holdings (SF 00/07 and SF 00/09) and from SF 00/07 to three other holdings (SF 00/08, SF 00/10 and SF 00/11) through the movement of infected pigs. An origin for outbreaks SF 00/06, SF 00/12, SF 00/13 and SF 00/14 has yet to be determined. However, their proximity to other infected holdings and the fact that all have occurred in infected areas established on or before 12 August, suggests that infection may have been introduced by the movement of people, vehicles etc., the movement of pigs onto and off holdings in these areas having been prohibited after that date.

Table 4: Results of serological examinations carried out between 8 August and 24 September and required to be reported under Commission Decision 2000/528/EC

County	No of Pigs in County	Total No of confirmed outbreaks	Date of last outbreak	No of holdings with suspect CSF reported	Sero-positive	Sero-negative
Norfolk	612,627	6	17 th Sept 2000	60	277	12126
Suffolk	778,841	6	13 th Sept 2000	46	175	13752
Essex	96,748	1	9 th Aug 2000	5	2	1041
Bedfordshire	37,402			1		118
Berkshire	67,464					2
Cambridgeshire	76,033			2		238
Carmarthenshire	3,965			1		12
Cheshire	81,057			2		
Cornwall	58,668			1		133
Cumbria	47,494			1		71
Derbyshire	57,125			3		189
Devon	187,551					123
Dorset	137,862			2		24
Gloucestershire	17,436					64
Hampshire	106,080			1		21
Hertfordshire	17,436			1		10
Isle of Wight	5,600			1		
Kent	30,628			1		3
Lancashire	121,571			1		9
Lincolnshire	336,887			4		258
Nottinghamshire	116,932					119
Oxfordshire	168,766			2		52
Powys	14,864					120
Shropshire	127,816			1		58
Somerset	157,443			4		138
Staffordshire	98,641					14
Surrey	24,613					10
Wiltshire	149,887					123
Yorkshire	1,068,320			2		241

(v) the nucleic acid sequences of the viral isolates examined are identical suggesting that all the outbreaks have been caused by the same virus. Epidemiological investigations have failed to identify the origins of the virus and the exact route of its introduction with certainty but it is possible the source could have been contaminated pig meat contained in edible products discarded by people who used public footpaths that ran adjacent to outdoor paddocks in which breeding sows were).

MAFF
1 October 2000

6. DETAILED REPORT ON CLASSICAL SWINE FEVER

OUTBREAK 2000/07

1. Location

District: Woodbridge
County: Suffolk
MAFF AHDO: Bury St Edmunds

2. Type and Size of Farm

Total No of pigs 3411
No of breeding pigs 411
No. of rearing pigs 1500
No. of fattening pigs 1500

Outdoor unit: Providing 550 weaners/week aged mainly 3.5 weeks to integration rearing units. One shed used as holding area for weaned piglets before transport off the farm the same day. Situated adjacent to SF00/01

3. Suspicion of Disease

Date of Suspicion: 01/09/00
Reported by Whom: Company veterinarian reports sick sows and suspicious post mortem results

History:

No of sick/dead pig: 110
No of healthy pigs 3301
Samples Taken: tonsil, spleen, , kidney, ileum, mesenteric lymph node from 4 pigs. EDTA and clotted bloods from 4 pigs for virus isolation. The herd was in the protection zone of SF 00/01, and had been sampled on 15/08/00 as the result of three tracings from SF00/01 with negative results

On 18 August one sow died and one boar euthanased. Two sows anorexic (one aborted). One gilt died 24 August and one or two depressed. On post mortem examination of 4 pigs on 1 September no significant lesions noted.

4. Method of Diagnosis

FAT on cryostat tissue sections
Virus isolation on tissue culture with discriminatory typing using monoclonal antibodies

PCR
ELISA serology

5. **Date of confirmation of disease:** 5 September 2000

6. **Depopulation**

Date of depopulation: 7/8 September 2000

Method of depopulation: Killing on the holding followed by destruction at a rendering plant

7. **Presumed date of infection:** 01 August 2000

8. **Date of preliminary cleansing and disinfection:** 15 Sept 2000

9. **Epidemiology**

Tracing back:

Animal contacts: No movements on since October 1999 of any breeding stock.

Personnel: No staff contact with other pig premises.

Transport contacts: No knacker visits. Feed lorries cleaned and disinfected.

Tracing off: 5 Nursery units and 1 breeder

Suspected that wildlife may have transferred infection from contiguous premises SF 00/01

10. **Zone Report**

1 km radius of infected holding: No. of holdings with pigs: 2

3 km Protection Zone: Established 5 September 2000
No. of holdings with pigs: 3

10 km Surveillance Zone Established 5 September 2000
No of holdings with pigs: 43

11. **Local measures:** As provided for in Directive 80/217

OUTBREAK 2000/08

1. Location

District: Woodbridge
County: Suffolk
MAFF AHDO: Bury St Edmunds

2. Type and Size of Farm

Total No of pigs 4500
No of breeding pigs 0
No. of rearing pigs 500
No. of fattening pigs 4,000

Outdoor/ and indoor unit: 7 kg to 30 kg weaners outdoors, then moved to indoor units.

3. Suspicion of Disease

Date of Suspicion: 04/09/00
Reported by Whom: Private Veterinary surgeon reported to Animal Health Office.

History:

No of sick/dead pig: 120
No of healthy pigs 4380
Samples Taken: tonsil, spleen, kidney, ileum, maxillary lymph node from 4 pigs. EDTA and clotted bloods from 4 pigs for virus isolation.

This herd was in the protection zone of SF 00/01. No clinical signs of disease were seen when veterinary examination done on 9 August and again on 16 August. A statistical bleed was done on 23 August assuming a uniform herd seroprevalence and 59 samples taken were all negative. No clinical signs of disease were seen at this visit. From the 29 August mortality rates started to increase and continued over the following days until the private veterinary surgeon was asked to visit on 4 September.

4. Method of Diagnosis

FAT on cryostat tissue sections
Virus isolation on tissue culture with discriminatory typing using monoclonal antibodies
ELISA serology

5. **Date of confirmation of disease:** 6 September 2000

6. **Depopulation**

Date of depopulation: 10/11 September 2000

Method of depopulation: Killing on the holding followed by destruction at a rendering plant.

7. **Presumed date of infection:** 21 August 2000

8. **Date of preliminary cleansing and disinfection:** 11 September 2000

7. **Epidemiology**

Tracing back: One breeder farm supplied all pigs from June 2000. This breeder pig farm is part of the breeding pyramid containing SF 00/02. On 26 August 63 blood samples taken from the herd were negative and a further inspection on 10 September reported no clinical signs of disease. Weaners were collected by owner of SF 00/08 from this farm on 4 August.

Animal contacts: Delivery of weaned pigs on 4 August. The premises is contiguous to SF 00/07, and in the protection zone for SF 00/01. Straying onto SF 00/07 a possibility.

Personnel: Owner only contact with other pigs when collecting replacements from breeder, and transporting pigs to slaughter. No staff contact with other pig premises, but son of one works on another pig farm. The area is popular with walkers and public paths cross the premises.

Transport contacts: Lorry vehicle visits on 2 August, 4 August, and 5 September.

Tracing forward: All pigs go to slaughter. Manure/slurry moved off to two farms in August.

10. **Zone Report**

1 km radius of infected holding: No. of holdings with pigs: 2

Protection Zone: Established 6 September 2000

No. of holdings with pigs: 4

Surveillance Zone Established 6 September 2000

No of holdings with pigs: 59

11. **Local measures:** As provided for in Directive 80/217

DETAILED REPORT ON CLASSICAL SWINE FEVER

OUTBREAK 2000/09

1. Location

Parish: Iken
County: Suffolk
MAFF AHDO: Bury St Edmunds

2. Type and Size of Farm

Total No of pigs	4366
No of breeding pigs	766
No. of rearing pigs	600
No. of fattening pigs	3000

Outdoor unit: Located on two farms - one used for breeding and rearing up to 7kg and then finished on second farm to go for slaughter. One unit separated by road from SF00/01

3. Suspicion of Disease

Date of Suspicion: 06/09/00
Reported by Whom: Private veterinary surgeon. Also at same time inconclusive blood sample from second unit taken as part of statistical survey of protection zone for SF00/07.

History:

No of sick/dead pig: 8
No of healthy pigs 4358
Samples Taken: Tonsil, spleen, kidney, maxillary lymph node, EDTA and clotted bloods from 4 pigs for virus isolation. Also blood samples taken previously as part of statistical survey of protection zone for SF00/07.

On 05 September gilts in part of the farm closest to SF00/01 were found to have ocular/nasal discharge, depressed, diarrhoea, pyrexia, cyanosis and anorexia. One believed to have aborted had a temperature of 108⁰ F. There had been a rise in mortality in the nursing herd from 9.5% to 15% in the last 10 days. On post mortem examination of four pigs abnormalities noted in some pigs were enlarged spleen, infarcts in spleen, cyanosis, haemorrhage in bladder mucosa.

4. Method of Diagnosis

FAT on cryostat tissue sections
Virus isolation on tissue culture with discriminatory typing using monoclonal antibodies
ELISA serology
PCR

5. **Date of confirmation of disease:** 10 September 2000

6. **Depopulation**

Date of depopulation: 16 September 2000

Method of depopulation: Killing on holding followed by destruction at a rendering plant.

7. **Presumed date of infection:** 15 August 2000

8. **Date of preliminary cleansing and disinfection:** 27 September 2000

7. **Epidemiology**

Tracing back: Breeding stock received from one company checked and cleared.

Animal contacts: Investigations continue. None known, indirect being investigated.

Personnel: Staff no contact with other pigs. Private veterinarian visited. Fieldsman visited on 27 July 2000.

Transport contacts: Investigations continue.

Tracing forward: Pigs from second unit go for slaughter

10. **Zone Report**

1 km radius of infected holding: No. of holdings with pigs: 5

3km Protection Zone: Established 10 September 2000
No. of holdings with pigs: 11

10 km Surveillance Zone Established 10 September 2000
No of holdings with pigs: 34

11. **Local measures:** As provided for in Directive 80/217

OUTBREAK 2000/10

1. Location

Parish: Felthorpe
County: Norfolk
MAFF AHDO: Bury St Edmunds

2. Type and Size of Farm

Total No of pigs	2340
No of breeding pigs	0
No. of rearing pigs	0
No. of fattening pigs	2340

Indoor unit: 7 kg to 30 kg in 2 houses. All in - all out. Moved off to finisher units at 30 kg.

3. Suspicion of Disease

Date of Suspicion: 06/09/00
Reported by Whom: Company Veterinary surgeon reported to Animal Health Office.

No of sick/dead pig: 70
No of healthy pigs 3284
Samples Taken: tonsil, spleen, kidney, ileum, maxillary lymph node, mesenteric lymph node from 4 pigs. EDTA and clotted bloods from 4 pigs for virus isolation, plus 6 EDTA and clotted bloods from in-contacts and 58 blood samples from statistical sampling of herd.

The site was depopulated on 3 August (this lot of pigs had good health - 0.5% mortality) and was re-populated on 8-11 August with piglets sourced from 8 premises. Two of the farms supplied piglets which were poor growers and developed respiratory signs and subsequently towards the end of August some nervous signs. Inappetance in some pens, pigs worsened in condition in one pen and Company veterinarian requested to visit 6 September 2000. Tremors, ataxia, pyrexia (106 °F). One skin blotches. Post mortem - enlarged spleen, Petechial haemorrhage epiglottis, spleen, intestine, kidney, liver.

This premises was visited on 22 August as a result of an association with SF 00/03 (knackerman contact 03 August). A statistical bleed was undertaken with negative results.

4. Method of Diagnosis

FAT on cryostat tissue sections
Virus isolation on tissue culture with discriminatory typing using monoclonal antibodies
ELISA serology
PCR

5. Date of confirmation of disease: 10 September 2000

6. Depopulation

Date of depopulation: 13 September 2000
Method of depopulation: Killing on the farm followed by destruction at a rendering plant.

7. Presumed date of infection: 08 August 2000

8. Date of preliminary cleansing and disinfection: 14 Sept 2000

7. Epidemiology

Tracing back: Eight breeder farms supplied pigs to the farm on re-population 8 to 11 August. One of these farms was infected premises SF 00/07 which supplied pigs on 8 August.

Animal contacts: Delivery of weaned pigs on 8 to 11 August.

Personnel: Owner no recent contact with other premises where pigs are kept. Visitors to site on 7 June, 29, 22, August, and 3, 6, September.

Transport contacts: Feed deliveries on 8, 18, 22, and 29 August.

10. Zone Report

1 km radius of infected holding: No. of holdings with pigs: 1

3km Protection Zone: Established 10 September 2000
No. of holdings with pigs: 19
10 km Surveillance Zone Established 10 September 2000
No of holdings with pigs: 163

11. Local measures: As provided for in Directive 80/217

OUTBREAK 2000/11

1. Location

Parish: Bylaugh
County: Norfolk
MAFF AHDO: Bury St Edmunds

2. Type and Size of Farm

Total No of pigs	1748
No of breeding pigs	348
No. of rearing pigs	700
No. of fattening pigs	700

Outdoor unit: On 51 paddocks plus shelters.

3. Suspicion of Disease

Date of Suspicion: 06/09/00
Reported by Whom: Owner contacted MAFF AHDO on 06/09/00 concerned about sick animals; farm was also identified as a tracing from SF 00/07

History:

No of sick/dead pig: 3
No of healthy pigs 1745
Samples Taken: tonsil, spleen, kidney, ileum, submandibular lymph node, mesenteric lymph node EDTA and clotted bloods from 3 pigs for virus isolation, and 60 blood samples from herd for serology.

Illness first noticed on 01 September when one sow aborted, one boar became recumbent, two sows anorexia; these animals deteriorated and two sows died; a further 30 sows in the same paddock became depressed and lethargic by 6 September. These sick pigs originated from SF 00/07. Sows (95) from SF00/07 were delivered on 17 July and a further 77 on 07 August. On post mortem examination enlarged submandibular and mesenteric lymph nodes with slight haemorrhage.

4. Method of Diagnosis

FAT on cryostat tissue sections
Virus isolation on tissue culture with discriminatory typing using monoclonal antibodies
ELISA serology/PCR

5. **Date of confirmation of disease:** 12 September 2000

6. **Depopulation**

Date of depopulation: 17 September 2000

Method of depopulation: Killing on the holding followed by destruction at a rendering plant.

7. **Presumed date of infection:** 17 July 2000

8. **Date of preliminary cleansing and disinfection:** 20 September 2000

7. **Epidemiology**

Tracing back: Breeding sows supplied from SF00/07 on 17 July and on 07 August.

Animal contacts: 95 sows from SF 00/07 on 17 July and 77 sows on 7 August.

Personnel: Staff no contact with other pigs.

Transport contacts: Feed deliveries on 09 August, and 02 August, and weekly prior to this. One fieldsman on farm 4 weeks' before.

Tracing forward: From the 01 July 2000 pigs supplied to 5 holdings on 09 August, 02 August, 31 July, 25 July, and 12 July.

10. **Zone Report**

1 km radius of infected holding: No. of holdings with pigs: 2

3km Protection Zone: Established 12 September 2000
No. of holdings with pigs: 10

10 km Surveillance Zone Established 12 September 2000
No of holdings with pigs: 132

11. **Local measures:** As provided for in Directive 80/217

OUTBREAK 2000/12

1. Location

Parish: Rumburgh
County: Suffolk
MAFF AHDO: Bury St Edmunds

2. Type and Size of Farm

Total No of pigs	470
No of breeding pigs	0
No. of rearing pigs	0
No. of fattening pigs	470

Indoor unit: 18 week old pigs in pens in two sheds. Other pig houses on the premises empty. 'All in - all out' unit. Contracted finishing unit. The holding is located approximately 0.5 km from SF00/04 in protection zone.

3. Suspicion of Disease

Date of Suspicion: 07 September 2000
Reported by Whom: Company veterinary surgeon reported suspect classical swine fever to MAFF.

History:

No of sick/dead pig: 22
No of healthy pigs 448
Samples Taken: tonsil, spleen, kidney, maxillary lymph node, mesenteric lymph node EDTA and clotted bloods from 4 pigs for virus isolation, and 59 blood samples from herd for serology.

A statistical bleed of the herd had been carried out on 23 August. 60 samples taken from 500 pigs as part of the surveillance testing around SF00/04. All samples were negative and all temperatures were normal with no clinical signs of disease. Since the 8 July there had been 21 deaths out of approximately 1000 pigs.

On 08 September two pens of pigs were affected in the one shed. Small areas of haemorrhage lower abdomen, ear blotchy, 3 difficulty getting up, one very sick pig which died during examination. This pig had purple skin lesions on legs and ears, haemorrhagic tonsils with necrosis, subcutaneous haemorrhage, haemorrhagic lymph nodes, congested lungs, petechial haemorrhages on heart and kidney, bloody urine, enlarged spleen,

haemorrhagic larynx. The other 3 pigs post mortem showed less severe clinical signs but included purple skin lesions, haemorrhagic lymph nodes, necrosis of tonsil and stomach mucosa. Eight out of 12 pigs had temperatures greater than 40° C

4. Method of Diagnosis

FAT on cryostat tissue sections

Virus isolation on tissue culture with discriminatory typing using monoclonal antibodies

ELISA serology

PCR

5. Date of confirmation of disease: 13 September 2000

6. Depopulation

Date of depopulation: 17 September 2000

Method of depopulation: Killed on the holding followed by destruction at a rendering plant

7. Presumed date of infection: 16 August 2000

8. Date of preliminary cleansing and disinfection:
18 September 2000

7. Epidemiology

Tracing back: 999 pigs moved onto premises from 4 premises between 9 May 2000 and 12 May 2000.

Animal contacts: As above.

Personnel: The manager of the unit is a haulier with one vehicle and frequently transports pigs. Private veterinary surgeon visited on 01 and 07 September. Fieldsman visits every two weeks, last visit on 4 September.

Transport contacts: The manager of the unit is a haulier with one vehicle and frequently transports pigs. Stopped transport from 06 September. One staff member helps on another pig unit as does father of manager.

Tracing forward: Three movements of pigs to market on 17, 26, and 31 July, and again on 02 August and 09 August. No further movements off because of movement restrictions in surveillance zone.

10. **Zone Report**

1 km radius of infected holding: No. of holdings with pigs: 2

3km Protection Zone: Established 13 September 2000
No. of holdings with pigs: 11

10 km Surveillance Zone Established 13 September 2000
No of holdings with pigs: 113

11. **Local measures:** As provided for in Directive 80/217

OUTBREAK 2000/13

1. Location

Parish: Denton
County: Norfolk
MAFF AHDO: Bury St Edmunds

2. Type and Size of Farm

Total No of pigs	4412
No of breeding pigs	442
No. of rearing pigs	1060
No. of fattening pigs	2910

Indoor unit: Part of independent company breeding piglets which are reared through to slaughter. Two sets of indoor sow and weaner accommodation and an associated rearing unit.

3. Suspicion of Disease

Date of Suspicion: 13 September 2000
Reported by Whom: MAFF inspector visiting under the Pig Welfare Disposal Scheme

No of sick/dead pig: 3

No of healthy pigs 4409

Samples Taken: tonsil, spleen, kidney, ileum, maxillary lymph node, mesenteric lymph node EDTA and clotted bloods from 3 pigs for virus isolation, and 60 blood samples from herd for serology.

The herd had been diagnosed as suffering from PMWS in February 2000 and lately the condition appeared to be improving. Approximately 50 pigs (growers) were believed to be suffering from PMWS at the time of the visit and showed muscle wasting, diarrhoea, coughing and pyrexia. Most of the pigs had normal temperatures but 104 and 106 ° F were recorded. On post mortem examination consolidation of the lungs was noted and enlarged lymph nodes, but otherwise no abnormalities detected. Breeding sows appeared healthy.

4. Method of Diagnosis

FAT on cryostat tissue sections

Virus isolation on tissue culture with discriminatory typing using monoclonal antibodies

ELISA serology

PCR

5. Date of confirmation of disease: 17 September 2000

6. Depopulation

Date of depopulation: 22 September 2000

Method of depopulation: Killed on the holding followed by destruction at a rendering plant

7. Presumed date of infection: 16 August 2000

8. Date of preliminary cleansing and disinfection:

7. Epidemiology

Tracing back: Breeding replacements bought from one Company

Animal contacts: Pig movements on are from own units (except breeding replacements.)

Personnel: Personnel movements being checked.

Transport contacts: Vehicle movements under investigation.

Tracing forward: Pig movements off are to slaughter.

10. Zone Report

1 km radius of infected holding: No. of holdings with pigs: 4

3km Protection Zone: Established 17 September 2000
No. of holdings with pigs: 11

10 km Surveillance Zone Established 17 September 2000
No of holdings with pigs: 121

11. Local measures: As provided for in Directive 80/217

OUTBREAK 2000/14

1. Location

Parish: Shelton
County: Norfolk
MAFF AHDO: Bury St Edmunds

2. Type and Size of Farm

Total No of pigs	1100
No of breeding pigs	90
No. of rearing pigs	80
No. of fattening pigs	930

Indoor unit: Breeder /fattener. Located in surveillance zone for SF00/05. Premises is close to SF00/06 which is 1.5 km away.

3. Suspicion of Disease

Date of Suspicion: 11/09/00
Reported by Whom: The farm is in the surveillance zone of SF00/05 and a statistical surveillance bleed done on 30 August revealed one positive SNT sample in 43 examined (10/09/00).

History:

No of sick/dead pig: 0
No of healthy pigs 1100
Samples Taken: tonsil, spleen, kidney, maxillary lymph node, mesenteric lymph node, ileum, EDTA and clotted bloods from 4 pigs for virus isolation in addition 103 other pigs were sampled.

The four pigs selected for post mortem examination were fatteners in one shed and were the ones which appeared to have been worst affected by PDNS. The sow which gave the positive SNT sample on 30 August could not be identified. In the 103 pigs blood sampled, no temperatures were greater than 105 °F. Underlying pneumonia in fatteners and signs of wasting. Pneumonia, some enteritis, one pericarditis, pale kidney.

4. Method of Diagnosis

FAT on cryostat tissue sections
Virus isolation on tissue culture with discriminatory typing using monoclonal antibodies
ELISA serology /PCR