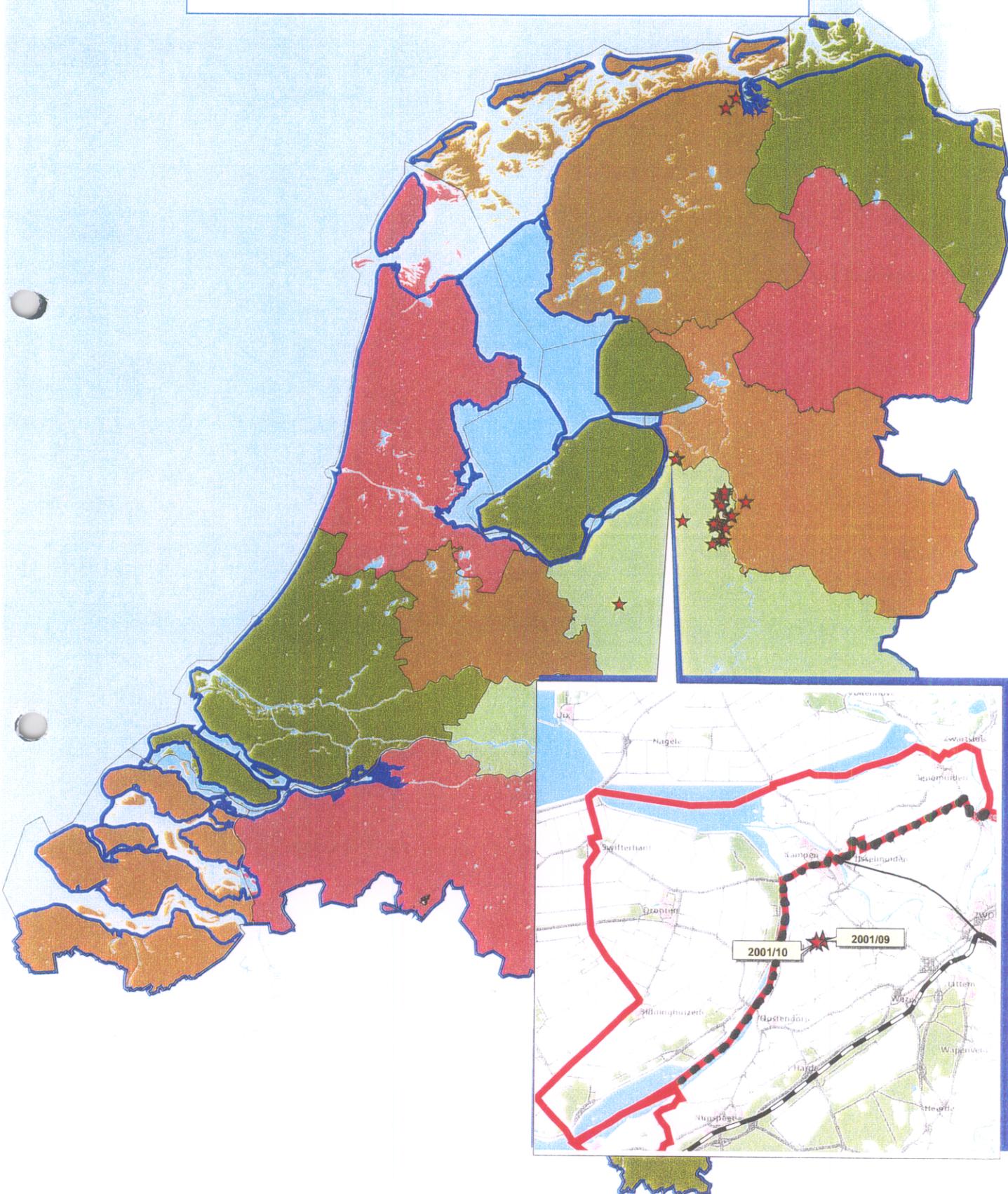


The Netherlands Foot and Mouth Disease 2001

Final Report Oosterwolde



**The Netherlands
Final Report on FMD outbreaks
2001/09 and 2001/10
Oosterwolde**

1. Introduction

The FMD epidemic in the Netherlands started with the introduction of the virus on 24 February 2001 with the import of infected calves from Ireland via France. The calves caused an outbreak of FMD on a mixed farm in Oene (2001/03), confirmed on 22 March 2001. This farm consisted of goats and calves.

Due to the outbreaks of FMD in the UK a transport ban of all susceptible animals was implemented on 26 February 2001. On 9 March 2001, the ban on the transportation of goats was temporarily lifted, because of welfare problems. Goats from the mixed farm in Oene, which already were infected but not yet detected, were transported to a farm in Oosterwolde on 13 March 2001.

The farm in Oosterwolde was declared suspect and visited due to the direct animal contact. During this visit no clinical signs of FMD were found. This farm was culled pre-emptively on 21 March 2001. During the depopulation serum samples were taken from 47 goats. All these samples turned out to be positive for FMD-antibodies. According to the seropositive results of goats not stemming from outbreak 2001/03, virus must have spread on this farm. For this reason the farm was declared FMD-positive, outbreak 2001/09 on 28 March 2001.

On 28 March 2001 clinical signs of FMD were found at a dairy farm 150 meters from outbreak 2001/09. This infection was confirmed and the farm culled on 29 March 2001, outbreak 2001/10.

EU measurements were implemented, restriction zones were established, clinical inspections were carried out, pre-emptive culling or suppressive vaccinations followed by pre-emptive culling took place, and the final screening in the restriction zones was carried out.

In this report, facts and figures of this area will be given. First, the two outbreaks will be described, followed by a description of the implementation of vaccination, the culling of all animals within the 2 km areas, the screening of the herds in the restriction zones, and a map of the area. This report is restricted to only that part of the surveillance zone of the outbreaks 2001/09 and 2001/10 that is not a part of the surveillance zone Noord Veluwe. The other parts of the surveillance zone of the outbreaks 2001/09 and 2001/10 are included in the surveillance zone Noord Veluwe. Therefore, the final screening in these parts will be carried out later. This is agreed during a meeting between the CVO and a CIE-delegation in Brussels.

2. Outbreaks

Outbreak 2001/09

1. **Location**
Village: Oosterwolde
Province: Gelderland
Municipality: Oldebroek
RVV-Region: East
2. **Type and size of farm**
No. of cattle: 327
No. of pigs: 0
No. of sheep: 36
No. of goats: 50
No. of other animals: 0
3. **Suspicion**
3.1 Date of suspicion: 18-03-2001
3.2 Visits of screening teams on: 21-03-2001
3.3 No. of cases with symptoms: 0
3.4 Symptoms:
3.5 Deaths: 0
4. **Method of diagnosis**
4.1 Investigation centre: ID-Lelystad, Division WDT
4.2 Method of diagnosis:
 - Detection of virus:
 - IDAS ELISA
 - virus isolation
 - RT-PCR
 - Detection of antibodies:
 - ELISA
 - Virus neutralisation test
5. **Date of confirmation:** 28-03-2001
6. **Date of depopulation:** 21-03-2001
7. **Date of preliminary disinfection:** 21-03-2001
8. **Epidemiology**
8.1 Presumed infection date: 13-03-2001
8.2 Links: 2001/03
8.3 Type of contact: animal

3. Restriction zones

Vaccination zone

A vaccination zone was established around outbreak 2001/09 on 28 March 2001. Within a radius of two kilometres, FMD-susceptible animals were vaccinated according to Decision 2001/246/EC (suppressive vaccination). The vaccinated animals have been culled pre-emptively later on. All farms within the 2-kilometres zone around both outbreaks were culled pre-emptively.

Protection zone

A protection zone with a radius of at least 4 kilometres was established around outbreak 2001/09 on 28 March 2001, according to the Decision 2001/246/EC. The protection zone of outbreak 2001/10 was similar to the one around outbreak 2001/09. All farms within this zone have been clinically inspected. Final screening has taken place according to the protocol described later.

Surveillance zone

A surveillance zone with a radius of at least 10 kilometres was established around outbreak 2001/09 on 20 March 2001. This surveillance zone was extended to at least 12 kilometres around both outbreaks after the implementation of the suppressive vaccination. A census has been made of all categories of animals of susceptible species on the holdings. The final screening of the north-western part of this area has taken place according to the protocol described later.

All zones are shown on the map included in the annex.

4. Vaccination and culling

In this section the facts about vaccination and culling are reported. Suppressive vaccination, in compliance with Decision 2001/246/EC, has been carried out around outbreak 2001/09. All vaccinated animals have been marked by mutilation. All vaccinated animals have been culled pre-emptively.

4.1 Protocol

Before vaccination, all animals to be vaccinated were inspected clinically and serum samples were taken. The serum sample size was based on the protocol to detect a disease prevalence of 5% with a confidence of 95%. Official veterinarians carried out the vaccinations. After vaccination, the vaccinated animals were marked by an ear punch. Two varieties of punch-shapes were used.

4.2 Vaccine

The vaccine was an inactivated vaccine based on subtype O-manissa.

4.3 Number of farms/animals vaccinated

Dates of vaccination:	Number of farms vaccinated:
29 March 2001	1
30 March 2001	19
31 March 2001	1

In total on 21 farms 1,620 animals have been vaccinated: 1,293 bovine animals, 46 porcine animals, 277 ovine animals and 4 caprine animals. All these animals have been culled later on, dates of culling are as follows.

Dates of culling:	Number of vaccinated farms culled:
3 April 2001	17
4 April 2001	2
5 April 2001	1
9 April 2001	1

4.4 Number of farms/animals culled

In total (included the earlier mentioned vaccinated farms) on 59 farms (thus 21 vaccinated and 38 not-vaccinated) 5,219 animals have been culled: 2,782 bovine animals, 1,296 porcine animals, 1,048 ovine animals and 93 caprine animals.

The 38 culled but not-vaccinated farms, are farms that are culled pre-emptively straight away or are small back-yard flocks not registered, keeping sheep or goats as pets.

Dates of culling:	Number of farms culled:
21 March 2001	1
29 March 2001	1
31 March 2001	4
2 April 2001	1
3 April 2001	21
4 April 2001	12
5 April 2001	6
9 April 2001	3
23 April 2001	2
28 April 2001	7
2 May 2001	1

5. Screening

Clinical examinations have been carried out on all farms in the protection zone.

21 days after culling and after the preliminary disinfection of the infected farm, outbreak 2001/10, the final screening of the susceptible animals in the protection and surveillance zone has been carried out according to Decision 2001/295/EC.

Final screening

5.1 Protocol

Protection zone

For the protection zone, the protocol was:

- Visit of all farms: clinical inspection and administrative control. For the administrative control, information is gathered about herd management in a certain time period before screening (e.g. number and type of sick or dead animals, use of medicine).
- Farms with sheep, goats and young dairy cattle (up to 2 years of age): clinical inspection and serological screening. Sampling was done based on a sample size to detect a within-herd prevalence of 5% (Confidence Index (CI) 95%).
- Farms with fattening cattle or pigs: clinical inspection.

Surveillance zone

For the protection zone, the protocol was:

- Visit of all farms: clinical inspection and administrative control.
- Visit of 150 randomly chosen farms for serological sampling. The number of 150 farms was based on a protocol to detect a between-herd prevalence of 2% (CI 95%). Sampling per herd was done based on a sample size to detect a within-herd prevalence of 5% (CI 95%).

All tests have been carried out and no signs of FMD were found on farms, neither in the protection nor in the surveillance zone.

5.2 Number of farms/animals

Protection zone

In total, 353 farms have been screened.

- 78 farms with a clinical inspection / administrative control and
- 275 farms with a clinical inspection / administrative control and a serological screening

Surveillance zone

In total, 435 farms have been screened.

- 282 farms with a clinical inspection / administrative control and
- 153 farms with a clinical inspection / administrative control and a serological screening

In total, 11,741 serum samples have been taken, 11,740 proved to be negative. 1 serum sample (from a farm in the surveillance zone) was found positive.

On one dairy farm one seropositive cow was found. Here upon a re-examination (50 serum samples have been taken) and killing of the seropositive cow was carried out. Only the killed cow was proved to be seropositive again, and thus considered to be a "singleton reactor".

6. Conclusion

With the above mentioned results and according to Decision 2001/246/EC, we decided to lift the protection zone Oosterwolde and the north-western part of the surveillance zone Oosterwolde.

DESCRIPTION PROTECTION ZONE OOSTERWOLDE OUTBREAK 2001-09 AND 2001-10

1. Vanaf de kruising N307 met Kamperstraatweg (KAMPEN) de Kamperstraatweg volgend in zuidoostelijke richting overgaand in zuidelijke richting tot de Zuiderzeestraatweg (N308).
2. N308 volgend in zuidwestelijke richting tot N309 (Flevoweg).
3. N309 volgend in westelijke richting overgaand in noordwestelijke richting tot N305 (DRONTEN).
4. N305 volgend in noordelijke richting tot N307.
5. N307 volgend in oostelijke richting in KAMPEN overgaand in zuidoostelijke richting tot kruising N307 met Kamperstraatweg (KAMPEN).

DESCRIPTION PART OF SURVEILLANCE ZONE OOSTERWOLDE TO BE LIFTED

1. Vanaf de brug over het Veluwemeer bij Harderwijk de Knardijk (Harderwijk) de N302 volgend in noordoostelijke richting tot de Futenweg N302 overgaand in N305 tot N710 Swifterweg.
2. N710 Swifterweg volgend in noordwestelijke richting overgaand in Biddingweg tot N307.
3. N307 volgend in noordelijke richting Kamperhoekweg tot snelweg A6.
4. Snelweg A6 volgend tot Ketelbrug.
5. Vanaf de Ketelbrug het Ketelmeer volgen in noordoostelijke richting overgaand in Zwarte Meer tot Veerweg (Zwartsluis).
6. Vanaf de Veerweg (Zwartsluis) de N331 volgend in oostelijke richting overgaand in zuidelijke richting de Rondweg, overgaand in Sluizerdijk (N331), overgaand in de Zwartsluizerweg (N331) tot de Nieuwe Weg
7. De Nieuwe weg volgend in noordelijke richting tot de Cellemuiden.
8. De Cellemuiden volgend in zuidwestelijke richting tot de Wolfshagenweg.
9. De Wolfshagenweg volgend in westelijke richting tot de Nieuwe Wetering.
10. De Nieuwe Wetering volgend in noordelijke richting tot de Groene Steeg.
11. De Groene Steeg volgend in westelijke richting tot de Oude Wetering.
12. De Oude Wetering volgend in zuidelijke richting tot de Rietsteeg.
13. De Rietsteeg volgend in westelijke richting tot de Verkavelingsweg.
14. De Verkavelingsweg volgend in noordwestelijke richting tot de Hagedoornweg.
15. De Hagedoornweg volgend in westelijke richting tot de Oudendijk.
16. De Oudendijk volgend in noordelijke richting tot de Koekoeksweg.
17. De Koekoeksweg volgend in westelijke richting tot de Plasweg
18. De Plasweg volgend in zuidwestelijke richting overgaand in de Burgemeester Van Engelenweg, overgaand in de Stationsplein, tot de Brug over de Ijssel.
19. De Brug over de Ijssel volgend in westelijke richting tot de Ijsselkade.
20. De Ijsselkade volgend in noordelijke richting overgaand in de Oranjesingel, overgaand in de Oostzeestraat, overgaand in Flevoweg de (N307), tot de brug over het Veluwemeer bij Roggebotsluis.
21. Vanaf de brug het Veluwemeer volgend tot de de brug over het Veluwemeer bij Harderwijk