



**OIE/FAO INTERNATIONAL SCIENTIFIC CONFERENCE  
ON FOOT AND MOUTH DISEASE  
Paris, 17-18 April 2001**



Original: English  
April 2001

**OIE/FAO INTERNATIONAL SCIENTIFIC CONFERENCE  
ON FOOT AND MOUTH DISEASE  
Paris, 17-18 April 2001**

An OIE/FAO<sup>1</sup> International Scientific Conference on foot and mouth disease (FMD) was held at the Office International des Epizooties (OIE) headquarters from 17 to 18 April 2001.

The Members of the OIE FMD and Other Epizootics Commission and the International Animal Health Code Commission, the Presidents of the OIE Regional Commissions, the Experts of the OIE FMD Reference Laboratories, as well as Senior Staff of the FAO Animal Health Services and the OIE Central Bureau participated at the Conference.

The OIE Regional Coordinators and the Regional Coordination Unit, Observers from Member Countries and intergovernmental organisations also attended the Conference.

Dr Tony Garland, FAO-EMPRES<sup>2</sup>, was appointed Rapporteur.

The Agenda and List of Participants are given at Appendices I and II, respectively.

Dr Romano Marabelli, President of the OIE and Dr Bernard Vallat, Director General of the OIE welcomed the participants and thanked Delegations and Representatives of Member Countries for attending the Conference. His opening address was followed by further words of welcome from Dr Yves Cheneau, Chief of the FAO Animal Health Service. Both Dr Vallat and Dr Cheneau wished the Conference every success. The two opening speeches are at Appendices III and IV.

Dr James Pearson, Head, OIE Scientific and Technical Department, presented the Conference Objective and the Conference Agenda. The Agenda was approved by the participants. Each session was presided over by a Chairperson and a Rapporteur, who lead the discussion on each of the listed Agenda items. The recommendations developed during the meeting were discussed, modified as needed, and approved by the Conference participants. The final recommendations of the Conference are listed below.

---

1 FAO: Food and Agriculture Organization of the United Nations

2 EMPRES: Emergency Prevention System for Transboundary Animal and Plant Pests and Diseases

---

**Conference objective:**

To consider current foot and mouth disease issues and draft science-based recommendations and resolutions, addressed to the Member Countries of the OIE and FAO, to be presented to the International Committee of the OIE at its May 2001 General Session and to the Governing Bodies of the FAO.

---

**RECOMMENDATIONS**  
**of the OIE/FAO International Scientific Conference**  
**on Foot and Mouth Disease**

RECOMMENDATION No. 1

**Review the following definitions in foot and mouth disease Chapter of the OIE *International Animal Health Code*:**

- a) The criteria for the declaration of an outbreak
- b) Freedom from disease or freedom from infection

CONSIDERING THAT

In the OIE *International Animal Health Code* (the *Code*), Chapter 1.1.1. General definitions, an 'infected zone' is defined as an area 'in which a disease included in this *Code* has been diagnosed' and the definition of an 'outbreak' is restricted to an 'Outbreak of Disease'. Neither of these definitions covers subclinical infection

The inclusion of subclinical infection in these definitions is important for disease control and trade

In *Code* Chapter 2.1.1. Foot and mouth disease (FMD), only two categories for freedom from FMD are recognised, namely: 'FMD free where vaccination is practised' and 'FMD free where vaccination is not practised'

Vaccinated animals can become subclinically infected or develop a carrier state

The OIE FMD and Other Epizootics Commission has proposed changes to Chapter 2.1.1. of the *Code* to address FMD infection

THIS CONFERENCE RECOMMENDS THAT

1. The relevant chapters of the *Code* be amended to include a definition of FMD infection, encompassing the category of subclinical infection.
2. The OIE FMD and Other Epizootics Commission and the OIE International Animal Health Code Commission finalise the proposed changes to Chapter 2.1.1. of the *Code* to redefine 'freedom from FMD' as 'freedom from FMD infection'.
3. The FMD and Other Epizootics Commission of the OIE define the surveillance standards required to verify the status of 'Freedom from FMD Infection'.

## RECOMMENDATION NO. 2

### **Emergency foot and mouth disease control methods:**

#### **a) Stamping-out/restriction of animal movements**

##### CONSIDERING THAT

The speed and extent of spread of outbreaks of the Pan-Asian strain of type O FMD in certain European countries during 2001 has been unprecedented

The spread of FMD virus within newly infected countries during the European outbreaks of 2001 occurred mainly through the movement of subclinically infected animals, and principally of sheep, and via contact with contaminated vehicles used for the transport of these animals

The exact mode of FMD contamination has not always been identified, but vehicles, markets, and other places where animals are collected have played a major role in the spread of the disease

There is increasing evidence from North Africa, the Middle East and Europe to suggest that subclinically infected sheep are a factor of major significance in the transmission and spread of FMD, both within and between countries and over long distances

The safe and timely disposal of large numbers of carcasses constitutes a serious impediment to the implementation of a successful stamping-out policy

There is currently insufficient evidence of alternative options to rendering, burning and burial for large-scale disposal of carcasses

National veterinary authorities should negotiate in advance with the environmental authorities as to the availability of options for carcass disposal for use in different areas of the country

International trade and movements of live animals and certain animal products are the main route of the international diffusion of FMD virus and other diseases

Early suspicion, recognition and laboratory diagnosis of FMD is essential for efficient control

Countries that are FMD free where vaccination is practised need a sensitive and specific test that can identify infection in vaccinated animals

There is a requirement for the establishment of the validity and suitability of serological tests for the detection and quantification of antibodies to the non-structural proteins of FMD virus and also for guidance on their use in surveillance to assist in the definition of the FMD status of a country/zone following implementation of a stamping-out policy

The imposition of restrictions on the movement of species that are not susceptible to FMD, and particularly of Equidae, beyond the existing provisions of Chapter 2.1.1. of the OIE *Code* has posed problems

##### THIS CONFERENCE RECOMMENDS THAT

1. Member countries recognise the emergence of new and/or increasing risks to animal health including: changes to the livestock industry; increased movement of people, product and livestock; illicit traffic; and other factors predisposing to disease. Accordingly, Member Countries should undertake risk analyses and ensure that the risks are communicated to the relevant authorities and other sectors.
2. Countries engaged in international trade recognise the increased risk and impact of the occurrence of FMD and review their legislation, contingency planning, emergency preparedness, prevention measures and the availability of resources to ensure their adequacy.

3. Member Countries define the roles of their Veterinary Services and recognise that a national crisis planning exercise may be necessary, involving other agencies, for the effective management of a major FMD emergency.
  4. The Director General of the OIE set up an ad hoc group of specialists to examine the problem of the safe and timely disposal of carcasses arising from the enforcement of a stamping-out policy, and to recommend international guidelines for this purpose.
  5. Member countries free of FMD establish procedures for the immediate restriction of markets, gatherings of animals and transportation of susceptible species throughout the country, when the veterinary authorities first confirm the presence of FMD.
  6. Member Countries establish equipment, facilities and procedures for the effective disinfection of all relevant modes of transport used for the movement of animals and animal products, including as appropriate both the exterior surfaces and the interior transport compartment(s), both before and after their use for these purposes.
  7. The OIE Standards Commission evaluate the validity of tests for the detection and quantification of antibodies to the non-structural proteins of FMD virus and their suitability for monitoring and surveillance programmes and prepare guidelines for their application.
  8. The OIE FMD and Other Epizootics Commission evaluate the risk of transmission of FMD by the movement of Equidae and develop appropriate guidelines for consideration by the OIE International Animal Health Code Commission.
-

RECOMMENDATION NO. 2

**Emergency foot and mouth disease control methods:**

**b) Criteria for the use of vaccination in livestock**

CONSIDERING THAT

FMD vaccines should comply with internationally recognised pharmacopoeia standards

Emergency FMD vaccination is not fully addressed in the *OIE Code*

National circumstances may alter the objectives and the available options for the control of FMD

THIS CONFERENCE RECOMMENDS THAT

1. The use of FMD vaccines that comply with the criteria defined in the *OIE Manual of Standards for Diagnostic Tests and Vaccines* be strongly encouraged, and the use of live FMD vaccines be strongly discouraged.
2. The definition, conditions of application and the consequences of emergency vaccination against FMD be considered for inclusion in the *OIE Guidelines*.

---

## RECOMMENDATION NO. 2

### **Emergency foot and mouth disease control methods:**

- c) Protection against FMD, including the use of vaccination, in special cases**  
(e.g. zoos, wildlife parks, rare breeds, rare genetic material, endangered species, animals in special research programmes)

#### CONSIDERING THAT

Certain rare and/or valuable animals and genetic resources are susceptible to foot and mouth disease

Member Countries have an obligation to conserve endangered species and in particular those covered by The Convention on International Trade in Endangered Species

In the case of a foot and mouth disease outbreak in a country/zone previously free of FMD, every measure should be taken to prevent the exposure of such animals to the virus

When the veterinary authorities consider that the risk of FMD infection appears imminent, vaccination is one measure that might be considered for the protection of such animals

In general, available FMD vaccines protect animals against the development of clinical disease, but do not protect them against the acquisition of infection

There is little scientific information available on the effects of FMD vaccination in wildlife species

Chapter 2.1.1., Article 2.1.1.6. of the OIE *Code* requires that, in order to regain the status of an 'FMD free country/zone where vaccination is not practised', either such vaccinated animals would have to be destroyed or a waiting period of at least 12 months would have to elapse

#### THIS CONFERENCE RECOMMENDS THAT

1. Member Countries ensure their national contingency plans include specific provision for the protection of such animals and materials.
2. The OIE consider the applicability of compartmentalisation for the control of FMD and other transboundary diseases.
3. Chapter 2.1.1., Article 2.1.1.6. of the *Code* be modified, where appropriate, to allow for emergency vaccination of certain rare or valuable animals to be permitted without prejudice to the FMD free status of the country/zone, provided that such vaccinated animals are individually identified and are maintained in a location that has physical barriers and where zoosanitary procedures are applied that are adequate to prevent contact with any susceptible animals that may be situated beyond the confines of the location, and that measures are in place that would prevent the spread of infection by fomites. This location could be considered as an 'FMD free zone where vaccination is practised', where all the attendant *Code* restrictions will apply to the vaccinated animals, their progeny, embryos, ova and semen and other products derived from these animals.
4. In respect of zoological collections, stakeholders should consider the funding of research into the efficacy of vaccines in non-domesticated ruminants and other species and the application of diagnostic tests in such species.

## RECOMMENDATION NO. 3

**Risk of FMD transmission due to trade in commercial products  
and the illegal carriage of animal products by international travellers**

## CONSIDERING THAT

The recent introduction of the Pan-Asian strain of type O FMD virus into new territories and countries, as into South Africa and Europe, is likely to have been through the feeding of contaminated swill or contact with contaminated fomites

Certain commodities of animal origin (e.g. sausage casings and intestines) are traded and some are carried by travellers without adequate precautions against their potential contamination with the FMD virus

Some Member Countries have recently imposed restrictions on products that are more stringent than those currently prescribed in Chapter 2.1.1 of the *OIE Code*

## THIS CONFERENCE RECOMMENDS THAT

1. Member Countries re-evaluate their legislation and enforcement practices to minimise the risk of the introduction of FMD and other infections through swill feeding.
  2. Member Countries strengthen measures to control the illegal carriage of animal products by international travellers.
  3. The OIE International Animal Health Code Commission in association with the OIE FMD and other Epizootic Commission develop standards for the importation of commodities that are not currently listed in the *Code* Chapter 2.1.1., Articles 2.1.1.8. and 2.1.1.28., such as sausage casings and other offal.
  4. Member Countries apply the standards of the *OIE Code*, unless there is scientific justification for more or less stringent restrictions. If such scientific evidence does exist, it should be brought promptly to the attention of the Director General of OIE, who will ask the specialist Commission to assess the information provided.
-

## RECOMMENDATION NO. 4

### **Research needed to better prevent, control and eradicate foot and mouth disease**

#### CONSIDERING THAT

Changes in farming and trading practices have exacerbated the distribution and severity of recent FMD outbreaks in previously FMD free countries

The role of subclinically infected animals and contaminated commodities is prominent in the dissemination of FMD

Molecular biology and immunological techniques have proved invaluable in the characterisation of FMD virus strains and the tracing of FMD infections

Current test systems for the surveillance and detection of FMD infection in individual animals and commodities pose some serious deficiencies

Currently available vaccines and vaccination systems have limitations

The slaughter of animals and disposal of carcasses pose logistical, welfare, environmental and social problems

There is little specific data on the risk of transmission of FMD infection by animal and animal products; particularly those derived from vaccinated animals

#### THIS CONFERENCE RECOMMENDS THAT

Research should be encouraged in the following domains:

1. **Early detection systems** including robust, pen-side diagnostic tests for use on live animals, and commodities, such as IgA, IgM detection, preclinical and subclinical diagnosis based on antigen/viral, relevant genomic or immunological methods.
2. **Surveillance systems**
  - Development of practical and statistically based sampling programmes.
  - Development and validation of serological tests that are applicable to a wide variety of livestock and wildlife susceptible to FMD virus. Of particular and immediate need are the serological tests to differentiate infection from vaccinal immunity, to establish that herds are free of FMD infection, and to develop assay systems that can be reliable for individual animal certification. Critical to accomplishing this task is the acquisition of standard reference sera.
  - Establishment of antigen profiles against well described polyclonal and monoclonal antibodies to better appreciate and anticipate vaccine protection and relevant viruses around the world. (To achieve the creation of antigen banks, Member Countries are urged to submit virus samples to a reference laboratory on a regular basis.)
3. **Vaccines** that, ideally, encompass some or all of the following improved characteristics over currently available vaccines:
  - Readily affordable; easily applied; induce a broad spectrum of antigenic coverage (cross serotype and strain), engender rapid onset and long duration of immunity; engender protection of the oropharynx against the acquisition of persistent infection.
  - Induce vaccinal antibody response(s) that can readily be distinguished from that (those) due to infection.



- Avoid requirements for refrigerated conservation.
- Can be combined with a proven antiviral drug, without modifying efficacy, and protect against viral infection.

In addition the following activities are encouraged

- Marker-type vaccine development.
- Development of vaccines that do not engender antibodies to the non-structural proteins of FMD virus in vaccinated animals.
- Development of vaccine efficacy studies in species other than cattle.

**4. Epidemiology** with special emphasis on:

- Risk analysis, impact and cost–benefit analysis.
- The role of subclinically infected animals (including wildlife, small ruminants, and camellidae), The role of Equidae in transmission of FMD infection to susceptible hosts.
- Infection tracking and predictive modelling.
- Re-evaluation of wind-borne spread of FMD virus.
- Development of *performance indicators* to assist countries with a particular epidemiological status of FMD to advance to a more favourable status.

**5. Risk analysis** on animal products and products from convalescent/vaccinated animals using epidemiological and experimental data, including predictive modelling studies.

**6. Economic research** and surveys on trends and market forces for animals and animal products as well as on the financial and other resource needs for the effective functioning of national Veterinary Services in dealing with disease emergencies and the management of national programmes for the control of major epizootics.

**7. Other methods to improve control**

- Disinfectants that are effective in the presence of organic matter, are noncorrosive, and do not harm the environment.
- Investigation of the survival of FMD virus in smoke plumes, when infected carcasses are burned.
- Methods of carcass disposal.

---

## RECOMMENDATION NO. 5

### **International action to safeguard animal health, trade and food security**

#### CONSIDERING THAT

The World Food Summit (November 1996), in recognising the importance of epidemic diseases of livestock (including foot and mouth disease) to both international trade and world food security, committed the governments of countries and the civil society to seek to ensure effective prevention and progressive control of such diseases

Infectious diseases, especially those of an epidemic nature or of public health concern, are assuming increasing economic importance in the changing farming and trading systems of both industrialised and developing countries

Emerging or evolving infectious diseases have the potential to quickly move from local to international significance

In recent years epidemic diseases have caused heavy losses both in industrialised and developing countries and that there have been dramatic incidents of transboundary and international spread of disease

The events involving the spread of the type O Pan-Asian strain of FMD virus to many countries and most recently to South Africa, the United Kingdom, Ireland, France and the Netherlands, and of type A virus in South America, have shown just how vulnerable countries are to epidemic livestock diseases, even countries with sophisticated quarantine controls

Effective disease control requires efficient disease detection systems, competent diagnostic laboratories and close co-operation and joint management of official Veterinary Services with private veterinarians, farmers, industry, consumers and other organisations, especially medical authorities and national emergency services, as well as regional and international co-operation

When national programmes are jointly developed, managed and financed between the public and the private sectors, notable successes have been achieved, for example in the Global Rinderpest Eradication Programme and the Hemispheric Plan for the Eradication of FMD in the Americas

#### THIS CONFERENCE RECOMMENDS THAT

1. The control of FMD and other animal diseases of significance to international trade, food security, food safety and public health be considered as a service for the good of the international public.
2. National Veterinary Services undertake to increase the awareness and the involvement and education of political authorities, farmers, veterinarians, other organisations, industry and consumers in the early detection, reporting and control of infectious diseases, as well as in the joint management and financing of national eradication programmes.
3. The provision of financial support, technical assistance and other support by countries with highly developed livestock industries to less developed countries to improve their national Veterinary Services and to better control and eradicate their important animal diseases will provide very substantial mutual benefits to both parties.
4. Special attention should be given to international co-ordinated programmes for rinderpest, foot and mouth disease and classical and African swine fever. This initiative would also provide templates for the surveillance and tactical control of other important diseases.

5. As a first step, the OIE and FAO should convene a high level international meeting to improve awareness and establish agreement that there international concerted actions are needed against foot and mouth disease and other animal diseases that are of significance for trade, food security, food safety and public health.
- 

.../Appendices





**18 April: 9:00-10:00**

- c) Criteria for the use of vaccination in special cases i.e. zoos, wildlife parks, rare breeds and special research programs,

- Dr S.K. Hargreaves Dr R.A. Bell

**10:00-11:00**

**4. Risk of foot and mouth disease transmission due to trade of products**

- Dr E. Correa Melo Dr A.N. Panin

**11:00-11:30 Break**

**11:30-12:30**

**5. Research needed to better control and eradicate foot and mouth**

- Dr K. De Clercq Dr J. Lubroth and other research workers

**12:30-13:00 Lunch**

**14:00-15:00**

**6. Development of programmes to control and eradicate foot and mouth disease and other epizootics from endemic countries; consider initiating this process by convening an FAO/OIE conference of high level officials and specialised financial institutions to discuss methods to develop and implement these programmes**

- Dr Y. Ozawa Dr M.M. Rweyemamu

**15:00-15:30 Break**

**15:30-16:30**

**7. Consideration of proposed resolutions to be presented to the OIE International Committee.**

- Dr G.A. Thomson Dr W.-A. Valder

**8. Closing remarks**

- Dr B. Vallat, Director General, OIE
- Dr Y. Cheneau, Chief Animal Health Service, FAO

**Rapporteur: Dr A.J.M. Garland**

---

**OIE/FAO INTERNATIONAL SCIENTIFIC CONFERENCE  
ON FOOT AND MOUTH DISEASE  
Paris, 17-18 April 2001**

**List of Participants**

---

**Office International des Epizooties**

---

**FMD COMMISSION MEMBERS**

**Dr G.R. Thomson** (*President*)  
OUA-BIRA/OAU-IBAR  
Organisation for African Unity  
Interafrican Bureau for Animal Resources  
P.O. Box 30786  
Nairobi  
KENYA  
Tel: (254-2) 334 550/251 517  
Fax: (254-2) 226 565  
E-mail: thomson.pace@oau-ibar.org

**Prof. V. Caporale** (*Vice-President*)  
Director  
Istituto Zooprofilattico Sperimentale  
dell'Abruzzo e del Molise 'G. Caporale'  
Via Campo Boario  
64100 Teramo  
ITALY  
Tel: (39.0861) 33 22 33  
Fax: (39.0861) 33 22 51  
E-mail: caporale@izs.it

**Dr E. Correa Melo** (*Secretary General*)  
Director  
Foot and Mouth Disease Coordinator  
Centro Panamericano de Fiebre Aftosa  
Caixa Postal 589  
20001-970 Rio de Janeiro  
BRAZIL  
Tel: (55-21) 671 3128  
Fax: (55-21) 671 2387  
E-mail: ecorrea@panaftosa.ops-oms.org

**CODE COMMISSION MEMBERS**

**Dr Wolf-Arno Valder** (*Vice-President*)  
Ministerialrat, Leiter des Referates  
Tierseuchenangelegenheiten beim Handel  
Bundesministerium für Ernährung,  
Landwirtschaft und Forsten  
Rochusstr. 1  
D-53123 Bonn  
GERMANY  
Tel: (49-228) 529 3618  
Fax: (49-228) 529 4401  
E-mail: wolf-arno.valder@bml.bund.de

**Dr Alexander N. Panin**  
Director of the All-Russia State Research  
Institute for Control, Standardisation and  
Certification of Veterinary Preparations  
Ministry of Agriculture and Food  
5, Zvenigorodskoye shosse  
123022 Moskva  
RUSSIA  
Tel: (7-095) 253.14.91  
Fax: (7-095) 253.14.91  
E-mail: vgnki\_vet@mtu-net.ru

**Dr Stuart K. Hargreaves**  
Director of Veterinary Services  
Department of Veterinary Services  
Ministry of Agriculture  
18 Borrowdale Road  
P.O. Box CY66  
Causeway Harare  
ZIMBABWE  
Tel: (263-4) 791355/722358  
Fax: (263-4) 72 08 79  
E-mail: veeu@africaonline.co.zw

**REGIONAL COMMISSIONS**

**Dr Rachid Bouguedour**  
*President of the Regional Commission for Africa*  
Directeur des services vétérinaires  
Ministère de l'Agriculture  
12, bd Colonel Amirouche  
16000 Alger  
ALGERIA  
Tel: (213-21) 71 17 12 poste 2771/2772  
Fax: (213-21) 74 34 34 / 74 63 33  
E-mail: dsval@wissal.dz

**Dr J. Gardner Murray**  
*President of the Regional Commission for Asia,  
the Far East and Oceania*  
Chief Veterinary Officer/Managing Director  
National Offices of Animal, Plant,  
Fish Health and Food Safety  
Commonwealth Department of Agriculture  
Fisheries and Forestry (DAFF)  
GPO BOX 858  
Canberra ACT 2601  
AUSTRALIA  
Tel: (61-26) 272 5848  
Fax: (61-26) 272 5697  
E-mail: gardner.murray@affa.gov.au

**Dr Nikola T. Belev**

President of the Regional Commission for Europe  
Bld Wasil Lewski 110  
1527 Sofia  
BULGARIA  
Tel: (359-2) 944 1514  
Fax: (359-2) 462 910  
E-mail: pam2kom@cit.bg

**Dr Sultan A. Sultan Al Khalaf**

President of the Regional Commission for the Middle East  
Deputy Director General  
Office of the Chairman & Director General  
The Public Authority for Agriculture,  
Affairs and Fish Resources  
P.O. Box 21422  
13075 Safat  
KUWAIT  
Tel: (965) 476 5026-38 / 472 8503  
Fax: (965) 472 3896 / 476 5026-38  
E-mail: sulahmed@hotmail.com

**FMD REFERENCE LABORATORIES/EXPERTS**

**Dr V. Saraiva**

Centro Panamericano de Fiebre Aftosa/OPS-OMS  
Foot and Mouth Disease Center/PAHO-WHO  
Av. Presidente Kennedy  
7778 Sao Bento  
Duque de Caxias  
25040-000 Rio de Janeiro  
BRAZIL  
Tel: (55-21) 671 3128  
Fax: (55-21) 671 2387  
E-mail: vsaraiva@panaftosa.ops-oms.org

**Dr Kenichi Sakamoto**

Chief, Diagnostic Laboratory  
Department of Exotic Diseases  
National Institute of Animal Health  
6-20-1, Josui-Honcho  
Kodaira-shi, Tokyo 187-0022  
JAPAN  
Tel: (81) 423-21-1441  
Fax: (81) 423-25-5122  
E-mail: skenichi@ed.affrc.go.jp

**Prof. Anatoly A. Gusev**

Director  
All-Russian Research Institute for Animal Health  
(ARRIAH)  
Ministry of Agriculture of the Russian Federation  
600900 Jur'Evets  
Vladimir  
RUSSIA  
Tel: (7.0922) 26.06.14  
Fax: (7.0922) 24.36.75/26.07.53  
E-mail: sinko@arriah.elcom.ru

**Dr V.M. Zakharov**

Deputy Director  
All-Russian Research Institute for Animal Health  
600900 Yur'evets, Vladimir  
RUSSIA  
Tel: (7.0922) 26.06.14/26.19.14  
Fax: (7.0922) 24.36.75/23.72.61  
E-mail: sinko@arriah.elcom.ru

**Dr Robin A. Bell**

Veterinary International Trade Team  
Ministry of Agriculture Fisheries and Food  
State Veterinary Service  
Room 403c, 1A Page Street  
London SW1P 4PQ  
UNITED KINGDOM  
Tel: (44) 207904 6169  
Fax: (44) 207904 6364  
E-mail: r.a.bell@ahit.maff.gsi.gov.uk

**Dr Juan Lubroth**

Foreign Animal Disease Diagnostic Laboratory  
NVSL/APHIS/USDA  
P.O. Box 848  
Greenport, NY 11944-0848  
UNITED STATES OF AMERICA  
Tel: (1.631) 323.2500  
Fax: (1.631) 323.3366  
E-mail: Juan.Lubroth@aphis.usda.gov

**REGIONAL REPRESENTATIONS**

*Africa*

**Dr Amadou Samba Sidibe**

Coordinator  
B.P. 2954  
Bamako  
MALI  
Tel: (223) 24 60 53 / 22 07 24  
Fax: (223) 24 15 83 / 23 94 47  
E-mail: pacereg@malinet.ml

*Americas*

**Prof. Emilio J. Gimeno**

Coordinator  
Cerviño 3101 2º  
1425 Buenos Aires  
ARGENTINA  
Tel: (54-11) 4803 4877  
Fax: (54-11) 4803 3688  
E-mail: oieamericas@ciudad.com.ar

*Asia*

**Dr Y. Ozawa**

Special Advisor  
East 311, Shin Aoyama Bldg  
1-1-1 Minami Aoyama  
Minato-Ku, Tokyo 107-0062  
JAPAN  
Tel: (81.3) 54 11 05 20  
Fax: (81.3) 54 11 05 26  
E-mail: oietokyo@tky.3web.ne.jp

*Middle East*

**Dr Ghazi Yehya**

Coordinator  
Kfarchima  
Office de la soie  
B.P. 268 Hazmieh  
LEBANON  
Tel: (961-5) 430 741  
Fax: (961-5) 430 742  
E-mail: rrmeaoie@intracom.net.lb

**REGIONAL COORDINATION UNIT**

**Dr L.J. Gleeson**

SEAFMD PROJECT  
c/o Faculty of Veterinary Medicine  
Kasetsart University  
Bangkok 10 900  
THAILAND  
Tel: (66-2) 9407491  
Fax: (66-2) 940 6570  
E-mail: rcu.seafmd@oie.int  
oiercu@lox1.loxinfo.co.th



## CENTRAL BUREAU

### Dr Romano Marabelli

President of the OIE International Committee  
Direttore Generale  
Dipartimento degli Alimenti,  
Nutrizione e Sanità pubblica veterinaria  
Ministero della Sanità  
Piazza Marconi, 20  
00144 Roma - EUR  
ITALY  
Tel: (39-06) 5994 3945 / 3946 / 3862  
Fax: (39-06) 5994 3217/3676  
E-mail: danspv@izs.it

### Dr B. Vallat

Director General  
12 rue de Prony  
75017 Paris  
FRANCE  
Tel: 33-(0)1 44.15.18.88  
Fax: 33-(0)1 42.67.09.87  
E-mail: b.vallat@oie.int or oie@oie.int

### Dr J. Pearson

Head, Scientific and Technical Department  
E-mail: je.pearson@oie.int

### Dr T. Chillaud

Head, Information and International Trade Department  
E-mail: t.chillaud@oie.int

### Dr Fernando Crespo León

Chargé de mission  
Scientific and Technical Dept  
E-mail: f.crespoleon@oie.int

### Dr Yoshiyuki Oketani

Chargé de mission  
Information and International Trade Department  
E-mail: y.oketani@oie.int

### Ms Maria Zampaglione

Press  
E-mail: m.zampaglione@oie.int

### Dr G. Zanella

Deputy Head, Information and International Trade Dept  
E-mail: g.zanella@oie.int

---

## European Commission for the Control of Foot and Mouth Disease (EUFMD)

---

### Dr K. De Clercq

CODA-CERVA-VAR  
Groeselenberg 99  
1180 Ukkel  
BELGIUM  
Tel/Fax: (32 2) 379 04 00/379 04 01  
E-mail: kris.de.clercq@var.fgov.be

### Dr D.E. Panagiotatos

Head, Section of Infectious Diseases  
Ministry of Agriculture  
2 Acharnon Street  
10176 Athens  
GREECE  
Tel: (30-1) 212 57 19  
Fax: (30-1) 825 26 14  
E-mail: vetserv@ath.forthnet.gr

### Dr Y. Leforban

Secretary of the European Commission  
for the Control of Foot and Mouth Disease  
FAO  
Via delle Terme di Caracalla  
00100 Rome  
ITALY  
Tel: (39) 06 570 55528  
Fax: (39) 06 570 55749  
E-mail: yves.leforban@fao.org

### Dr T. Soós

Director, State Institute for the Control of  
Veterinary Biologicals, Drugs and Feeds  
X. Szállás u.8., P.O. Box 318  
1475 Budapest 10  
HUNGARY  
Tel: (36-1) 262 95 79  
Fax: (36.1) 262 28 39  
E-mail: soost@oai.hu

### Dr Ignacio Sanchez Esteban

Subdirector General de Sanidad Veterinaria  
C/ Corazón de María N° 8  
28002 Madrid  
SPAIN  
Tel: (34-91) 347 8295  
Fax: (34-91) 347 8299  
E-mail: isanchez@mapya.es

---

**Food and Agriculture Organisation of the United Nations (FAO)**

---

**Dr Yves Cheneau**

Chief, Animal Health Service  
Animal Production and Health Division  
FAO  
Via delle Terme di Caracalla  
00100 Roma  
ITALY  
Tel: (39-06) 570 53531  
Fax: (39-06) 570 55749  
E-mail: yves.cheneau@fao.org

**FAO EMPRES**

**Dr A.J.M. Garland**

Collingwood, Dawney Hill  
Pirbright, Woking  
Surrey GU24 ONF  
UNITED KINGDOM  
Tel: (44-1.483) 47 34 76  
Fax: (44-1.483) 48 00 23  
E-mail: tony.garland@btinternet.com

**Dr M.M. Rweyemamu**

Head, Infectious Diseases Group  
Animal Production & Health Division  
FAO  
Via delle Terme di Caracalla  
00100 Rome  
ITALY  
Tel: (39) 06 570 56772  
Fax: (39) 06 570 53023  
E-mail: mark.rweyemamu@fao.org

---

**International Atomic Energy Agency (IAEA)**

---

**Dr J.R. Crowther**

FAO/IAEA  
Wagramerstrasse 5  
P.O. Box 100  
A-1400 VIENNA  
AUTRICHE  
Tel: (43.1) 2600 26054  
Fax: (43.1) 26007  
E-mail: J.Crowther@iaea.org

---

**Organization for African Unity/Inter-African Bureau for Animal Resources (OAU-IBAR)**

---

**Dr René Bessin**

Coordinator of the Pan African Programme  
for the Control of Epizootics (PACE)  
OAU/IBAR  
P.O. Box 30786  
Nairobi  
KENYA  
Tel: (254-2) 338 570  
Fax: (254-2) 220 546/226 565  
E-mail: rene.bessin@oau-ibar.org

---

**European Union (EU)**

---

**Dr J. Février**

Administrateur principal  
Commission européenne  
Direction générale VI - Agriculture B II 2  
86 Rue de la Loi  
1049 Bruxelles  
BELGIQUE  
Tel: (32 2) 296 58 72  
Fax: (32 2) 295 31 44  
E-mail: jacques.fevrier@cec.eu.int

---

**Observers**


---

**Mr Pierre Choraine**

Federation of Veterinarians of Europe (FVE)  
1, rue Defacqz  
1000 Brussels  
BELGIUM  
Tel: (32.2) 538.29.63  
Fax: (32.2) 537.28.28  
E-mail: p.choraine@fve.org

**Dr Caryll Shailer**

Counsellor (Veterinary Services)  
New Zealand Mission to the European Communities  
Square de Meeûs 1  
1000 Brussels  
BELGIUM  
Tel: (32.2) 550.12.19  
Fax: (32.2) 513.48.56  
E-mail: caryllshailer@compuserve.com

**Dr Leos Celeda**

State Veterinary Administration  
Tesnov 17  
117 05 Praha 1  
Prague  
CZECH REPUBLIC  
Tel: (420 2) 231 9554  
Fax: (420-2) 2181 2971  
E-mail: l.celeda@svs.aquasof.cz

**Dr Preben Willeberg**

Chief Veterinary Officer  
Danish Veterinary and Food Administration  
Ministry of Agriculture and Fisheries, Morkhoj Bygade 19  
DK-2860 Soborg  
DENMARK  
Tel: (45) 33 95 61 15  
Fax: (45) 39 67 52 48  
E-mail: pw@fdir.dk

**Dr Isabelle Chmitelin**

Chef des Services Vétérinaires  
Directrice générale adjointe  
Direction générale de l'alimentation  
Ministère de l'agriculture et de la pêche  
251, rue de Vaugirard  
75732 Paris Cedex 15  
FRANCE  
Tel: 33-(0)1 49 55 81 77  
Fax: 33-(0)1 49 55 55 91  
E-mail: isabelle.chmitelin@agriculture.gouv.fr

**Dr Monique Eloit**

Directrice adjointe  
AFSSA  
23, avenue du Général-de-Gaulle, BP 19  
94701 Maisons-Alfort Cedex  
FRANCE  
Tel: 33-(0)1 49 77 13 50  
Fax: 33-(0)1 49 77 90 05  
E-mail: dgal-secserv@dgal.varenne.minagri.agriculture.gouv

**Dr Véronique Bellemain**

Vétérinaire Inspecteur en chef  
Adjointe au sous-directeur de la santé et de la protection animales  
Direction générale de l'alimentation  
Ministère de l'agriculture et de la pêche  
251, rue de Vaugirard  
75732 Paris Cedex 15  
FRANCE  
Tel: 33-(0)1 49 55 84 80  
Fax: 33-(0)1 49 55 43 98  
E-mail: veronique.bellemain@agriculture.gouv.fr

**Dr Albert Costelloe**

Deputy Chief Veterinary Officer  
Department of Agriculture, Food and Rural Development  
Kildare Street  
Dublin 2  
IRELAND  
Tel: (353-1) 607 2484 / 607 2000  
Fax: (353-1) 676 2989/ 661 6263 /6620198  
E-mail: albert.costelloe@daff.irlgov.ie

**Dr Antra Brinke**

Deputy Director  
State Veterinary Service  
Ministry of Agriculture  
Republikas laukums 2  
Riga LV-1981  
LATVIA  
Tel: (371-7) 095 247  
Fax: (371-7) 322 727  
E-mail: antra@vvd.vita.gov.lv

**Dr Aurelia Ionescu**

Head of the Department for Diagnostic Coordination  
of Ruminants and Equides Diseases  
National Sanitary Veterinary Agency  
Institute for Diagnosis and Animal Health  
Ministry of Agriculture and Food Industry  
Bd. Carol I n° 24 - Sectorul 3  
Bucuresti cod 70033  
ROMANIA  
Tel: (40-1) 410 1299/410 9960  
Fax: (40-1) 411 3394  
E-mail: aureliaionescu@yahoo.com

**Mr J. Mulder**

Expert Agriculture Product  
Brussels  
BELGIUM  
E-mail: j.mulder@europarl.eu.int

**Dr Anders Engvall**

State Epizootiologist  
Department of Disease Control and Biosecurity  
National Veterinary Institute  
SVA, P.O. Box 7073  
S-750 07 UPPSALA  
SWEDEN  
Tel: (46.18) 67 40 00  
Fax: (46.18) 30 91 62  
E-mail: anders.engvall@sva.se

**Dr Bengt Nordblom**

Chief Veterinary Officer  
National Swedish Veterinary Services  
Head of Department for Animal Production and Health  
Swedish Board of Agriculture  
S-551 82 Jönköping  
SWEDEN  
Tel: (46-36) 155 230 / 155 000  
Fax: (46-36) 308 182  
E-mail: bengt.nordblom@sjv.se