



# THE EMPRES TRANSBOUNDARY ANIMAL DISEASE BULLETIN

EMPRES E-MAIL: [empres-livestock@fao.org](mailto:empres-livestock@fao.org)

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### Peste des Petits Ruminants in Iraq

The State Board of Veterinary Services, Ministry of Agriculture, Baghdad, through a fax received by the OIE on 15 September, 1998, reported an outbreak of PPR. This outbreak started about 27 July, 1998 in Faida, a border town between Ninevah and Dohuk Governorates through which animals are believed to be smuggled into Dohuk for eventual transportation to Turkey for sale.

### Foot-and-Mouth disease in Transcaucasian area

The situation in the Transcaucasian area is of great concern. The Russia Research Institute for Animal health, Vladimir, Russian Federation (The OIE Regional Reference Laboratory for FMD) has reported that they have isolated a strain of type A very close to A/Iran 96 from FMD cases reported in cattle in the Amasiia district of Armenia. Considering that the disease occurred in a transhumance area, the risk of spreading the disease in Armenia and to neighbouring countries is high. Urgent measures are needed to control the disease in this region.

### Rinderpest in Russia

The Main Veterinary department of the Russian Federation has reported to OIE the detection on 18<sup>th</sup> August 1998 of an outbreak of rinderpest in Shimanovsk District of Amur Region close to the border with China. The disease was reported in a single village (Simanovo) with an estimated date of first infection of 5th August. This event is of great concern to the Global Rinderpest Eradication Programme (GREP) for which FAO provides technical co-ordination through its Emergency Prevention System for Transboundary Animal and Plant Pests and diseases (EMPRES).

### CCPP in Tanzania

Thanks to recent investigations in the northern part of the country, the presence of CCPP has been confirmed in Tanzania with the isolation of *Mycoplasma capricolum subsp. capripneumoniae* at the laboratory of Uppsala, Sweden.

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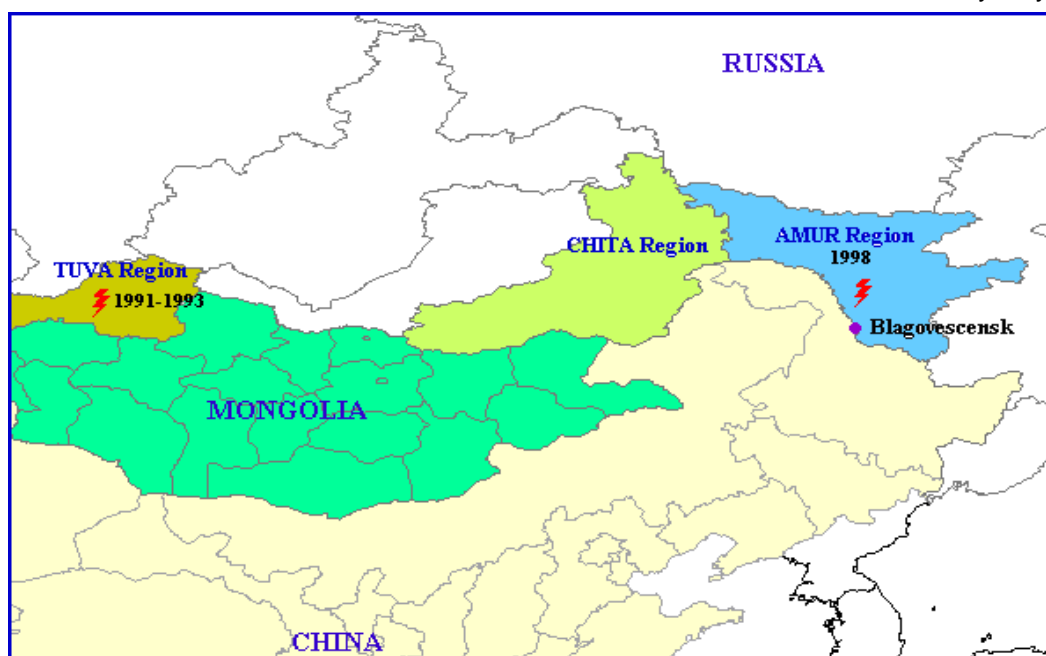
# RINDERPEST

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## Rinderpest in Russia

The Main Veterinary department of the Russian Federation has reported to OIE the detection on 18<sup>th</sup> August 1998 of an outbreak of rinderpest in Shimanovsk District (127 deg. E, 55 deg. N approx.) of Amur Region which is close to the border with China. The disease was reported in a single village (Simanovo) with an estimated date of first infection of 5<sup>th</sup> August. This event is of great concern to the Global Rinderpest Eradication Programme (GREP) for which FAO provides technical co-ordination through its Emergency Prevention System for Transboundary Animal and Plant Pests and diseases (EMPRES).

The last outbreaks of rinderpest reported in the Russian Federation occurred in the Tuva Autonomous Region (97 deg. E, 50 deg. N approx.) on the border with Mongolia in the period December 1991 to January 1993, after some 24 years of apparent freedom from the disease. Genetic characterisation of virus isolated from the Tuva outbreak showed the presence of both a vaccine strain (almost certainly isolated from recently vaccinated cattle) and a rinderpest virus strain that appeared closely related to one isolated in Afghanistan in 1961. The 1991-2 outbreaks were over 3,500 km from the nearest known endemic foci of the disease in Pakistan and the source of infection remains a mystery.



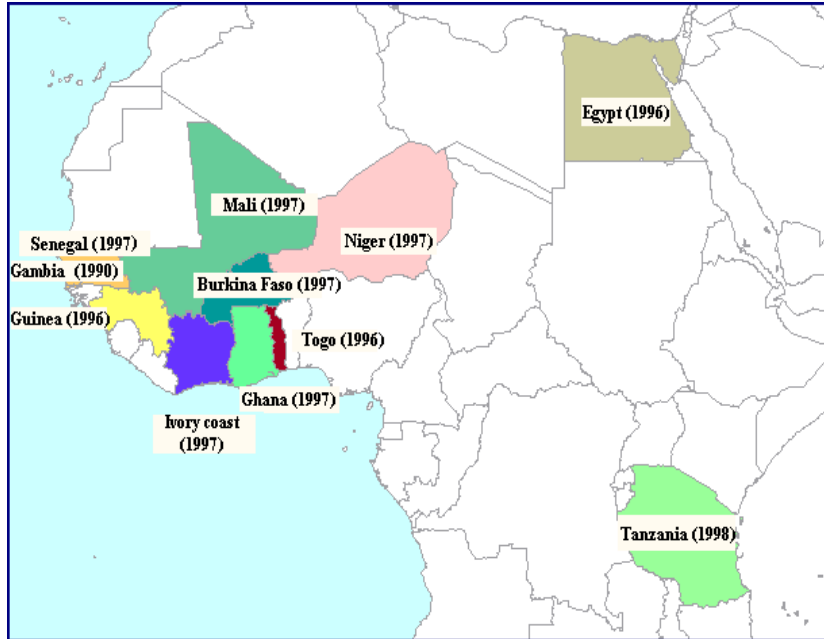
Recent investigations have provided no evidence for the presence of rinderpest in the central Asian states, Mongolia and China. Evidence for rinderpest absence in most of Asia is still being gathered but confidence has been growing that rinderpest outside Africa is present now only in Pakistan/Afghanistan and the Arabian Peninsula with an area of uncertainty in the "Kurdish triangle" of Turkey/Iraq/Iran. However, the present outbreak of rinderpest in Amur Region raises a suspicion, *inter alia*, that there could exist a hidden focus of rinderpest somewhere in Asiatic Russia, Mongolia or China, despite our belief that Mongolia has been free since at least 1993 and China since 1955. Although Amur Region is some 1,500 km from the 1991/93 disease outbreak, it is still far closer to it than the nearest known focus of rinderpest in Pakistan. Therefore, the possibility of the two events (1991/93 and 1998) being related and sharing a common source (i.e. re-appearance of rinderpest from an undescribed hidden focus) cannot be ruled out on the information available so far. It is gratifying that the Russian Federation authorities have assigned experts to investigate and eliminate the outbreak.

EMPRES, in collaboration with the FAO World Reference Laboratory for Rinderpest (Pirbright Laboratory, UK), maintains intense epidemiological surveillance on the evolving global situation of rinderpest in support of GREP and is working with the OIE, Russian colleagues and countries in the region to clarify the origin of the outbreak.

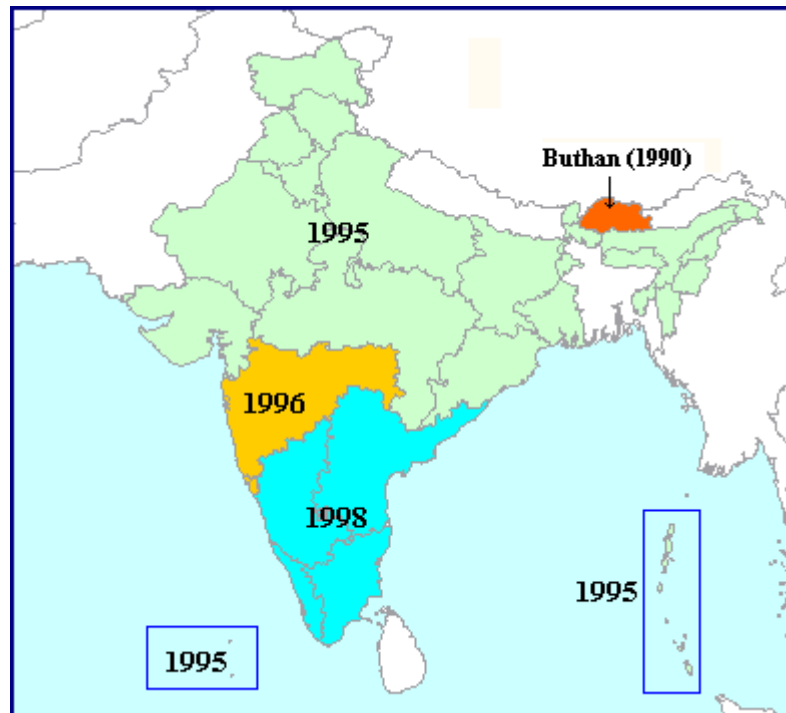
# OIE Pathway : Update on OIE declarations

## Year of Declaration of Provisional Freedom from Rinderpest

### AFRICA



### ASIA



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## FOOT AND MOUTH DISEASE

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### Update on the FMD situation in Turkey and in Transcaucasian region

In total, 12 outbreaks due to the new type A strain ( A/Iran 96) have been reported to OIE during the first 9 months of 1998. They occurred in 6 Provinces of Central Anatolia and in 3 Provinces of Western Anatolia. The low number of type A FMD outbreaks reported in Turkey during the last 3 months (1 outbreak in July and no outbreak in August and in September) indicates that the virus did not continue to spread to the west as it was initially feared. Thanks to the emergency vaccination with the homologous vaccine, which was carried out in Thrace during the summer, the risk of FMD spreading to Europe has been greatly reduced.

By contrast, the situation in the Transcaucasian area is of great concern. The OIE Regional Reference Laboratory for FMD of Vladimir, Russia, has reported that they have isolated a strain of type A very close to A/Iran 96 from FMD cases reported in cattle in the Amasiia district of Armenia.



Considering that the disease occurred in a transhumance area, the risk of spreading the disease to Armenia and neighbouring countries is high. Urgent measures are needed to control the disease in this region. The European Commission for the Control of Foot-and-Mouth Disease, FAO and other international organisations are investigating the emergency actions that should be taken to prevent the extension of the disease in the region and its introduction to Russia and to Europe.

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## NEWCASTLE DISEASE

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### Newcastle disease in Australia

Three recent outbreaks of a highly virulent strain of Newcastle disease have been reported in Australia. The disease has been identified on three farms in Blacktown, Glenorie and Rylstone, Western Sydney, New South Wales.

The last time Australia experienced Newcastle disease was in 1932.

Estimated date of first infection: 1 August 1998 (provisional).

*Total number of animals in the outbreaks: 88,000 layers, 2,500 broilers, 9,000 pullets, 10 geese and 4 ostriches.*

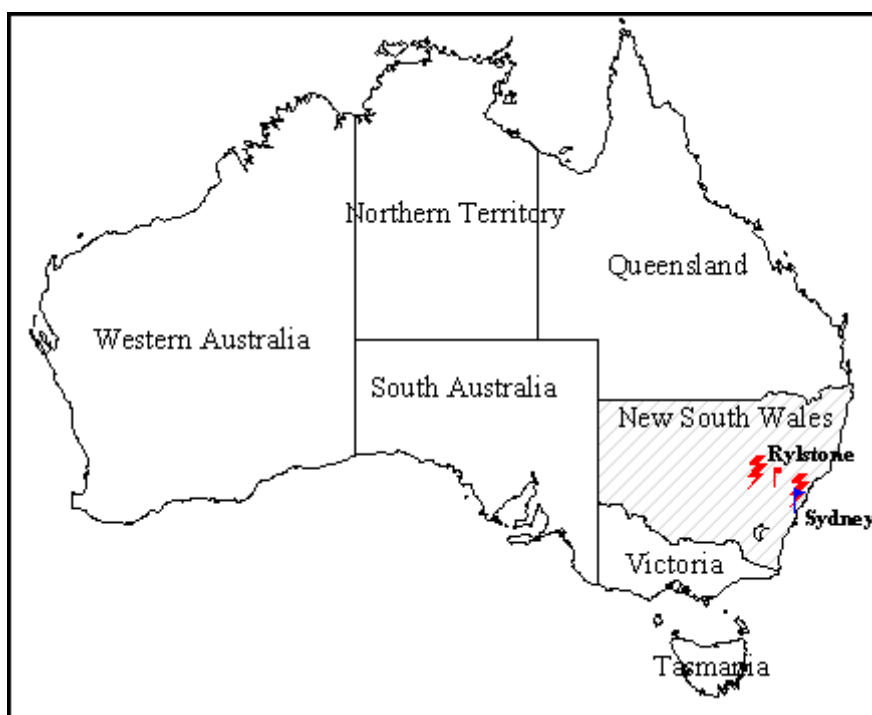
These farms supply eggs and meat to the domestic market in the Sydney metropolitan area. No birds, poultry or products have been exported from these properties. No poultry have been processed in an export abattoir.

Extensive active surveillance in the restricted and control areas has resulted in more than 100 poultry farms being visited and almost 10,000 blood and swab samples collected (all negative to date). Almost 100 samples collected from wild birds around the three infected farms have also been negative. Passive surveillance with the assistance of an organised network of private veterinarians is also in place. There is no evidence of infection elsewhere in Australia.

Slaughter-out of all poultry has been completed on the three infected farms, as of 28 September 1998. All three farms remain under strict quarantine.

Surveillance has confirmed that the disease has been effectively regionalised according to the principles established by OIE. Therefore, no restrictions have been placed on the movement of poultry or poultry products within Australia, except from the surveillance zone around the infected farms, ie the rest of Australia should be recognised as a virulent newcastle disease-free zone.

*(Extracts from a fax to OIE from Dr G. Murray, Chief Veterinary Officer, Department of Primary Industries and Energy, Canberra)*



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## PESTE DES PETITS RUMINANTS

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### **Peste des Petits Ruminants (PPR) in Iraq**

The State Board of Veterinary Services, Ministry of Agriculture, Baghdad, through a fax received by the OIE on 15 September, 1998, reported an outbreak of PPR which started about 27 July, 1998 in Faida, a border town between Ninevah and Dohuk Governorates through which animals are believed to be smuggled into Dohuk for eventual transportation to Turkey for sale. The disease was also reported from four villages; Azadi, Kherpe Sufla, Beibinava and Kendala Sur in Northern Iraq. The Baghdad authorities carried out vaccination of about 250,000 animals in the Faida area using Tissue Culture Rinderpest Vaccine. They have also requested for assistance from the FAO for control of the epidemic through emergency provision of homologous PPR vaccine, establishment of differential diagnostic capability and emergency disease surveillance. Outbreaks of PPR have also been reported in Dohuk Governorate where agricultural services are currently being implemented by FAO through the Oil-for-Food programme. Investigations are being undertaken and homologous PPR vaccines are being purchased.

### **Tanzania still free of PPR**

In the framework of a Technical Cooperation Project (TCP/URT/7821) and in order to rule out the presence of PPR in Tanzania, 3000 serum samples have been tested in September at the Animal Disease Research Institute of Dar Es Salaam. All were negative for PPR, which seems to confirm the absence of the disease in the country.

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## CONTAGIOUS CAPRINE PLEUROPNEUMONIA

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### **CCPP in Tanzania**

Contagious Caprine Pleuropneumonia is a severe disease of goats characterised by respiratory distress, coughing and nasal discharge, with a high mortality rate. The disease is widespread in eastern Africa and the Middle East. The agent responsible for the disease is *Mycoplasma capricolum subsp. capripneumoniae*.

In recent years, CCPP has been suspected in the Northern districts of Tanzania but has never been confirmed. Despite several studies on goat pneumonias have been carried out and different mycoplasma isolated (*M. mycoides subsp. Capri*, *M. agalactiae*, ...), the agent responsible for CCPP remained hidden until now.

In order to assess the status of the country with regard to the disease, the Ministry of Agriculture, through funds provided by FAO, dispatched a mission to northern Tanzania, where the disease was suspected.

During the mission, clinical signs of CCPP along with high mortality rate were observed especially in Korogwe district (Tanga region). Specimens for Laboratory investigation were obtained from necropsied goats and sent to the National Veterinary Institute - Sweden (OIE reference laboratory for CCPP), where *Mycoplasma capricolum subsp. capripneumoniae* was identified.

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## CLASSICAL SWINE FEVER

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### **Classical Swine Fever in Germany**

One outbreak of Classical Swine Fever was reported in Muenster (in the north-western part of Germany) in a holding for fattening and breeding. 208 susceptible animals were present in the outbreak. Control measures were taken accordingly (stamping out, quarantine of the infected holding, tracing of animal movements into and out of the infected holding).

*Summary of a fax received by OIE on 13 October 1998 from Dr Zwingmann, Chief Veterinary Officer, Ministry of Food, Agriculture and Forestry, Bonn.*

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## RIFT VALLEY FEVER

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### **Risk of Rift Valley Fever and other diseases from livestock imported into the Kingdom of Saudi Arabia from the Horn of Africa**

Every year, several million sheep and goats are exported to Saudi Arabia from ports in Somalia, primarily during a four-month period correlating with the Haj activities. The animals originate from a wide area of Ethiopia and Somalia, and they can be moved from there to Saudi Arabia in a matter of days. The trade has proceeded for many years, until a recent epidemic of Rift Valley fever (RVF) in the region of the Horn of Africa prompted a ban by Saudi Arabian authorities on 10 February 1998. In 1983, cattle imports from Somalia to the Kingdom of Saudi Arabia were likewise banned because of the risk of rinderpest.

Rift Valley fever is an acute mosquito-borne viral disease affecting mainly ruminant animals and humans. It can cause abortions of pregnant animals, and a high mortality rate in young animals. In humans, it usually causes an influenza-like disease but occasionally leads to more serious complications that can be fatal.

From late October 1997 to January 1998, torrential rains 60–100 times the seasonal average occurred across most of East Africa, resulting in the worst flooding in the Horn of Africa since 1961. In December 1997, unexplained deaths were reported in people in the North Eastern Province of Kenya and in southern Somalia. Surveys confirmed the presence of a haemorrhagic syndrome, that is, fever and mucosal or gastrointestinal bleeding, and some patients were shown to have acute infection with RVF virus. RVF cases were confirmed in people in the North Eastern, Central, Eastern, and Rift Valley Provinces of Kenya, and in the Gedo, Hiran, and Lower Shabelle Regions of Somalia. Livestock losses of up to 70 percent in sheep and goats, and 20 to 30 percent of cattle and camels, were also reported and surveys confirmed that RVF was present in livestock. However, a range of other infections also contributed to the high mortality in livestock — including nonspecific pneumonia, pasteurellosis, contagious caprine pleuropneumonia, contagious pustular dermatitis, bluetongue, and complications of mange and foot rot.

The ban on livestock imports from the region was apparently imposed for public health reasons because of concern that slaughter of RVF virus infected livestock could result in disease transmission to people attending the Haj in Mecca during the period from January to April 1998. The imposition of a ban was a reasonable response to a suddenly increased,

but uncertain risk from a zoonosis that could have had significant consequences if introduced into Saudi Arabia.

The appearance of epidemic RVF after unusually heavy rains is consistent with the epidemiology in most previous epidemics of this disease. Field investigations conducted by the Food and Agriculture Organization of the United Nations (FAO) in August 1998 found no clinical evidence of RVF disease in livestock in the arid and semi-arid parts of southeastern Ethiopia, northern Somalia and northern Kenya and indicate that the epidemic ceased in February–March 1998. The investigations confirmed that the floods had receded and that since March 1998, rainfall in the Horn of Africa has returned to normal or below normal levels. The investigations concluded that the risk of RVF in the region has now returned to about the extremely low level that prevailed before the extraordinary rains of October 1997 to January 1998.

Current information, therefore, indicates that the public health risk of RVF to the Kingdom of Saudi Arabia has markedly abated and returned to pre-epidemic levels. These remaining risks will, based on past experience, decline still further provided that rainfall patterns return to normal. There is a possibility that, as has been seen following some other RVF epidemics, there could be a resurgence of virus activity and clinical disease in the Horn of Africa during the next wet seasons, particularly should they be above normal.

The residual low public health risk of introducing RVF with livestock from the Horn of Africa could be further reduced, as would the risk of introducing other exotic diseases, by implementing the following actions:

- 1- Establish and validate remote sensing techniques for the Horn of Africa to monitor and predict times and locations where RVF may emerge into epidemic proportions. This predictive epidemiology capacity could be widely used to effectively combat several human, animal and plant pests.
- 2- Institute pre-export animal inspection and regulated, orderly movements for export of sheep and goats in all countries exporting these animals. These actions are commonly recognized procedures based on the biological characteristics of diseases and, if conscientiously implemented, will reduce risks to acceptable levels. Several project proposals to implement such actions, prepared in mid-1998, are available from FAO for appraisal. Actions taken to improve health measures against RVF would also help to reduce the risk to Saudi Arabia of other significant animal diseases by ensuring clinical examination of the health of small ruminants before export.

3- Re-imposition of pre-export animal inspection and regulated orderly movement controls for cattle and camels, as has been done in the past, would significantly reduce the risk of introducing other exotic diseases (rinderpest, LSD, FMD) into Saudi Arabia. FAO/UNDP prepared a comprehensive project proposal for this purpose in late 1997.

Pre-export vaccination using existing RVF vaccines is contraindicated. Under Office International des Epizooties (OIE) rules, use of the live attenuated RVF vaccine places the country or region into a RVF infected category until three years after vaccination ceases. The killed RVF vaccine is not sufficiently immunogenic to assure protection from the disease and requires two vaccinations, 2 to 4 weeks apart, to achieve moderate levels of protection.

4- Enhance post-import control measures to ensure that there is no exposure of susceptible Saudi livestock to potentially infected animals imported for slaughter. The potential consequences of the spread of some of these diseases warrant review of measures taken to exclude them and actions to improve these measures would they be warranted. FAO in the early 1990s in collaboration with Saudi authorities initiated a review of Saudi Arabian livestock import practices, laboratory diagnoses and legislation. This report could be up dated for review and recommendations implemented in light of current conditions.

*(Extracted from FAO consultancy report - TCP/RAF/8821 - Risk of Rift valley Fever from livestock imported into the Kingdom of Saudi Arabia from the Horn of Africa - It is understood that the Saudi Arabian ban on small ruminants has now been lifted)*

### **Rift Valley Fever in West Africa**

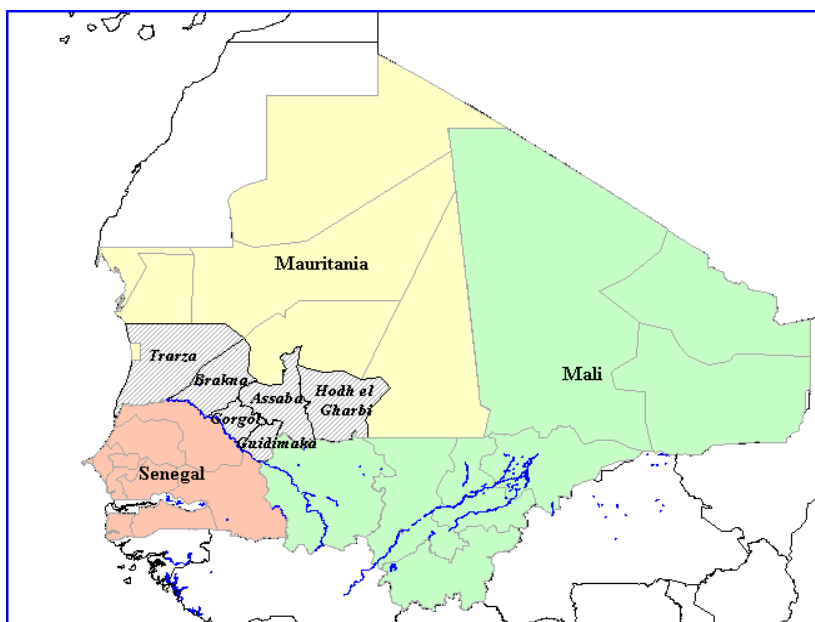
After an epidemic of Rift Valley Fever in East Africa (November 1997), Mauritania is experiencing the same problem in the southern part of the country.

The alert first came from the region of Hodh El Gharbi where 6 people died of hemorrhagic fever at the regional hospital of Aioun, in September. At the same time, high rates of abortion were noticed in small ruminants.

The human cases of hemorrhagic fever were investigated and samples sent to the Institut Pasteur of Dakar were tested positive by PCR. Serum samples showed also the presence of IgM antibodies, revealing a recent contact with the virus.

These facts seem to correlate with a new outbreak of Rift valley fever in the area. The first outbreak in the country was recorded in 1987 and killed 200 people. The spread of the disease is not known precisely but serological surveys carried out in 1997 showed a silent circulation of the virus in Traza, Assaba, Hodh El Garbi, Gorgol and Guidimakha regions (see map).

This disturbing event raises, once again, the importance of being able to detect the early stage of outbreaks of diseases like Rift Valley Fever which have a dramatic impact on human health. Veterinary Services in the region should concentrate efforts on their disease surveillance system in order to enhance their capability to detect and contain promptly transboundary animal diseases of major importance.





## Contributions from FAO Reference Laboratories and Collaborating Centres

### FMD report for June to September

Country	FMD virus serotypes
<b>Burkina Faso</b>	<b>NVD</b>
<b>Nepal</b>	<b>O, A</b>
<b>Pakistan</b>	<b>NVD</b>
<b>Philippines</b>	<b>O</b>
<b>Rwanda</b>	<b>O</b>
<b>Saudi Arabia</b>	<b>NVD</b>
<b>Uganda</b>	<b>SAT2</b>
<b>Yemen</b>	<b>NVD</b>

*NVD : No virus detected*

#### Communication with EMPRES FAO (Rome)

fax: +39 6 5705 3023

e-mail: [empres-livestock@fao.org](mailto:empres-livestock@fao.org)

Mark Rweyemamu  
Senior Officer , Infectious Diseases / EMPRES  
tel. +39 6 5705 6772

e-mail: [Mark.Rweyemamu@fao.org](mailto:Mark.Rweyemamu@fao.org)

Peter Roeder  
Animal Health Officer (Infectious Disease Emergency)  
tel. + 39 6 5705 4637

e-mail: [Peter.Roeder@fao.org](mailto:Peter.Roeder@fao.org)

Kris Wojciechowski  
Animal Health Officer (Virology)  
tel. +39 6 5705 4180

e-mail: [Kris.Wojciechowski@fao.org](mailto:Kris.Wojciechowski@fao.org)

Abdelali Benkirane  
Animal Health Officer (Bacteriology)  
tel. +39 6 5705 2681

e-mail: [Abdelali.Benkirane@fao.org](mailto:Abdelali.Benkirane@fao.org)

Roger Paskin  
Animal Health Officer (Epidemiology)  
tel : +39 06 57005 4747  
e-mail : [Roger.Paskin@fao.org](mailto:Roger.Paskin@fao.org)

Karim Ben Jebara  
Radiscon technical support Officer  
tel.+39 6 570.53135

email: [Karim.BenJebara@fao.org](mailto:Karim.BenJebara@fao.org)

Vincent Martin  
Associate Professional Officer (France)  
tel: +39 6 570 55428

email: [Vincent.Martin@fao.org](mailto:Vincent.Martin@fao.org)

#### Joint FAO/IAEA Division,(Vienna) fax +43 1-20607 ,PO Box 100, Vienna, Austria

Martyn Jeggo  
Head, Animal Production and Health Section  
tel. +43 1 2060 26053 e-mail: [M.H.Jeggo@iaea.org](mailto:M.H.Jeggo@iaea.org)

John Crowther  
Technical Officer, Near East  
tel +43 1 2060 26054 e-mail: [J.Crowther@iaea.org](mailto:J.Crowther@iaea.org)

Bernadette Abela  
Short Term Officer

Tel +43 1 26 00 26 064 e-mail : [Babela.@iaea.org](mailto:Babela.@iaea.org)

#### FAO Regional Officer

Denis Hoffman  
Senior APH Officer Asia & The Pacific - Bangkok, Thailand  
tel: + 66 2 281-7844 Ext. 308  
e-mail: [Denis.Hoffman@fao.org](mailto:Denis.Hoffman@fao.org)

Talib Ali  
Senior Senior APH Officer Near East - Cairo, Egypt  
tel: + 202 361.0000  
e-mail: [Talib.Ali@field.fao.org](mailto:Talib.Ali@field.fao.org)

C. Arellano Sota  
Senior APH Officer Latin America & The Caribbean -  
Santiago, Chile  
tel: + 56-2 337.2221  
e-mail: [Carlos.ArellanoSota@fao.org](mailto:Carlos.ArellanoSota@fao.org)

Moises Vargas  
Regional EMPRES epidemiologist  
tel: + 56 2 337 2222  
e-mail: [Moises.VargasTeran@fao.org](mailto:Moises.VargasTeran@fao.org)

Julio de Castro  
APH Officer Southern & East Africa - Harare, Zimbabwe  
e-mail : [Julio.Decastro@field.fao.org](mailto:Julio.Decastro@field.fao.org)

David Nyakahuma  
Regional EMPRES Associate Professional Officer, Accra  
e-mail: [David.Nyakahuma@fao.org](mailto:David.Nyakahuma@fao.org)

Paul Rossiter  
Regional epidemiologist (PARC)  
fax: +254.2.332046  
e-mail: [parcepid@africaonline.co.ke](mailto:parcepid@africaonline.co.ke)

Roland Geiger  
Technical Officer, Africa  
tel +254.2. 332046 e-mail: [parcepid@africaonline.co.ke](mailto:parcepid@africaonline.co.ke)