



Food and Agriculture
Organization of the
United Nations



European Commission for the Control
of Foot-and-Mouth disease

European neighborhood

Report on significant FAST diseases events and information

April-June 2023

EuFMD Pillar II

European Commission for the Control of Foot-and-Mouth Disease



Funded by
the European Union

Contents

Acronyms and abbreviations	iii
Introduction	iv
Significant events and information	1
<i>Foot-and-mouth disease (FMD)</i>	1
Near East	1
North Africa	2
Southeast European Neighborhood (SEEN)	2
<i>Peste des petits ruminants (PPR)</i>	5
Near East	5
Southeast European Neighborhood	5
<i>Lumpy skin disease (LSD)</i>	7
Near East	7
Southeast European Neighborhood (SEEN)	7
<i>Rift Valley fever (RVF)</i>	8
<i>Sheep pox and goat pox (SPGP)</i>	8
Near East	8
Southeast European Neighborhood (SEEN)	8
Summary	10
Reports of important disease incidents since the end of the reporting period	10

Acronyms and abbreviations

ELISA	Enzyme-linked immunosorbent assay
FAST diseases	Foot-and-mouth And Similar Transboundary animal diseases
FMD	Foot-and-mouth disease
LR	Large ruminants
LSD	Lumpy skin disease
NSP	Non-structural proteins
OIE	World Organization for Animal Health
PCP-FMD	Progressive control pathway for foot-and-mouth disease
PCR	Polymerase chain reaction
PD ₅₀	Protective dose of 50 percent (a measure of vaccine potency)
PPR	Peste des petits ruminants
RVF	Rift Valley fever
SPGP	Sheep pox and goat pox
SP	Structural proteins
SR	Small ruminants
WAHIS	World Animal Health Information System

Introduction

The European Commission for the Control of Foot-and-Mouth Disease (EuFMD) risk reduction program in the European neighboring regions of North Africa, Near East, and Southeast European Neighborhood is delivered within the Hold-FAST strategy. This strategy continues the focus upon FMD risk reduction and extends the scope of preparedness and risk reduction activities to similar transboundary animal diseases which pose an immediate threat to the EuFMD Member Nations.

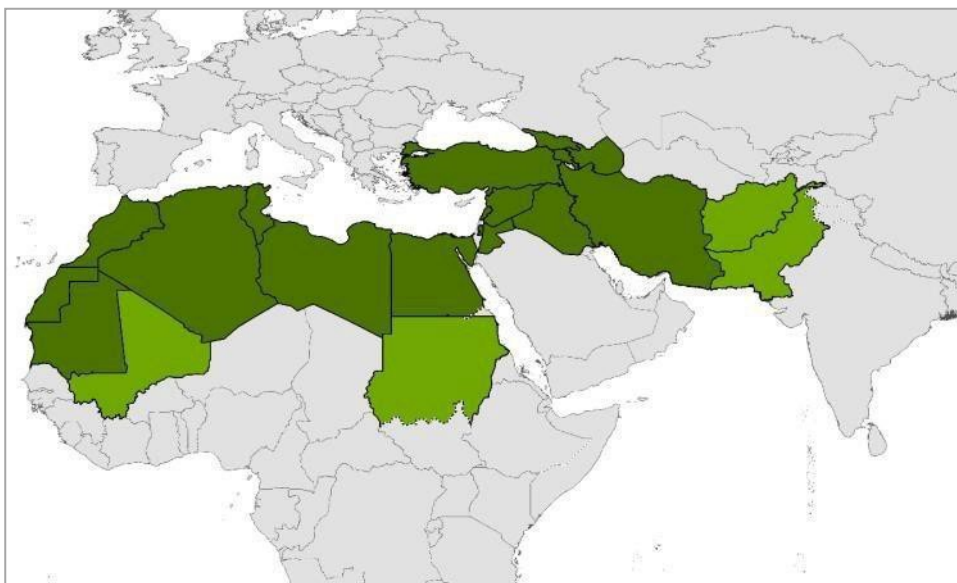
The program focuses on the control of Foot-and-mouth And Similar Transboundary animal diseases (FAST) in the neighbouring regions through the improvement of prevention, surveillance, and control. In this context, the FAST quarterly report of significant events provides relevant and regular risk information to risk managers operating in EuFMD Member Nations and neighboring countries.

The constant monitoring of the epidemiological situation together with information on the implementation of control and surveillance strategies increases awareness of major transboundary animal disease threats for Europe and the regions of North Africa, the Near East, and Southeast European Neighborhood (SEEN).

The European neighborhood

The neighbourhood of the current 39 EuFMD Member Nations is made up by non-EuFMD Members that either have land borders with EuFMD Members, are members of the Mediterranean animal health network (REMESA), or whose animal health status provides an early warning for FAST disease spread to the neighborhood of Europe. The activity of Pillar II includes EuFMD Member Nations in the European neighboring region (Republic of Türkiye, Georgia) (Figure 1).

Figure 1. Countries included in the activities of the EuFMD Pillar II



Source: United Nations Geospatial. 2020. Map of the World.

www.un.org/geospatial/file/3420/download?token=TUP4yDmF

EuFMD Member Nations in European neighboring region: Republic of Türkiye, Georgia.

Having land borders with EuFMD Member Nations: Armenia, Azerbaijan, the Islamic Republic of Iran, Iraq, the Syrian Arab Republic, Lebanon, Palestine, Jordan, and Egypt.

Non-EU Members of REMESA: Jordan, Lebanon, Egypt, Libya, Tunisia, Algeria, Morocco, and Mauritania.

Countries significant for epidemic spread of FAST diseases to the above countries: Sudan, Mali, Afghanistan, and Pakistan.

The boundaries and names shown and the designations used on these map(s) do not imply the expression of any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries. Dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Significant events and information

The data reported to the World Organization for Animal Health (WOAH), and mentioned in this publication, have been sourced from the World Animal Health Information System (WAHIS) and refer to the period between 1 April and 30 June 2023. Other information has been obtained through the EuFMD activities and networks in the European neighbourhood. Information referring to the period before 1 April might be reported when relevant or not previously reported.

Foot-and-mouth disease (FMD)

Near East

Country	FMD Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Egypt	One outbreak reported in this quarter.	-	-	Vaccination campaign was carried out from March to May. In total 261 817 cattle, 110 518 buffaloes, 175 716 sheep, 12 595 goats were vaccinated. PVM was carried out through a collection of 702 serum samples (pre and post vaccination).	-	Data shared by the country.
Jordan	No outbreaks reported in this quarter (the last resolved in early March).	-	Sero-surveillance campaign will be conducted during the next quarter.	Vaccination of large and small ruminants in the governorates surrounding the previous outbreaks is ongoing. A total of 11 789 sheep, 812 goats, 41 000 cattle were vaccinated.	-	Data shared by the country.
Lebanon	-	-	Completion of serum collection for NSP ELISA test and PMV. Samples shipment in progress.	The first phase of the vaccination finished in April 2023 with about 85 percent of large and small ruminants vaccinated.	-	Data shared by the country.

Palestine	<p>Four outbreaks reported from March to May 2023 (Yatta, Hebron, Bethlehem (2)) in sheep and goat flocks, Nr. suspected animals 210, Nr. sick animals 62, Nr. death 43 (newborn).</p> <p>One case weakly positive for O serotype in LR, in Jenin district (among 21 suspected samples analyzed, 19 tested by PCR and two by NSP Elisa) in the reporting period.</p>	Serotype O/ME-SA/PanAsia-2ANT-10.	Active and passive surveillance.	Vaccination continues to newborn and fattening animals. 25 percent of the flock was not vaccinated in backyard – local breed). Vaccination LR with SAT2 vaccine is starting.	-	Data shared by the country.
-----------	--	-----------------------------------	----------------------------------	--	---	-----------------------------

North Africa

Country	FMD Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Libya	From March to April report of Ten outbreaks eight of which still ongoing.	Serotype O (O/EA-3).	Passive surveillance, active surveillance in dairy cattle	-	Limited animal movement; survey in the surrounding area; monitoring and tracking.	Data shared by the country, WAHIS, PROMED.
Morocco	No outbreaks reported. (The last one in 2019)	-	Launch of a risk-based serological survey in May 2023	Vaccination of cattle completed at the beginning of June (1 724 043 animals). For sheep and goats campaign is scheduled for September 2023).	-	Data shared by the Country during REMESA meeting.
Tunisia	Five outbreaks have been reported with 66 cases among all species involved (cattle, goat and sheep). They are still ongoing. (WAHIS).	Serotype O (characterization not completed).	-	Vaccination for cattle and small ruminants is underway.	-	WAHIS – ProMED.

South East European Neighborhood (SEEN)

Country	FMD Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Republic of Türkiye	139 FMD outbreaks were recorded in this quarter.	<p>SAT2 (first case was identified in March 23).</p> <p>49 outbreaks were due to FMDV SAT2/XIV, and 59 due to serotype O and 31 were not serotyped.</p> <p>Spread dynamics currently seems that it has been shifted. Recently trend of number of outbreaks and incidence are increased in area in which common grazing used particularly.</p>	<p>In this quarter: 18 000 LR and 7 154 SR were clinically examined for FMD in Thrace region under the Thrace RBSP. 1 199 sera were collected from the European side of Istanbul and tested by NSP ELISA.</p> <p>Clinical surveillance was achieved in 378 epi-units out of 394 in the buffer zone area. A total of 29 122 animals were examined for FMD surveillance.</p> <p>Clinical surveillance was implemented in the South-easter Anatolia for early detection purpose.</p> <p>In this context, 22 185 animals were examined clinically from 261 epi-units in the 5 provinces.</p> <p>To exclude virus circulation, a sero-surveillance was conducted in the candidate epi-units for animals' transportation to temporary animals' markets located in Thrace. 26 244 sera collected from cattle and SR before quarantine period were tested by NSP ELISA.</p> <p>After quarantine period, 41 241 sera were collected from candidate animals individually and tested by NSP ELISA.</p>	<p>Start of the spring campaign in February with quadrivalent 6PD50 vaccine (O Panasia2, A/Asia/GVII; A/Asia/IRAN05 and Asia1/SINDH08), the planned completion date was 22 April. After detection of SAT2 in Iraq, a vaccine containing the SAT2 serotype was produced and made ready for use as of 9 March 2023.</p> <p>Since then, a bivalent, serotype O and SAT2, and partially trivalent vaccine is used for re-vaccination campaign and outbreak response. 89 percent coverage was achieved in this second vaccination course.</p>	<p>A range of control measures were implemented after the SAT2 confirmation in Iraq, incl. activation of contingency plan, increased clinical surveillance and movement restrictions. All outbreaks were investigated and responded to.</p>	<p>ProMed, WAHIS. Data shared by the country.</p>

Azerbaijan	-	-	Active and passive surveillance.	540 949 cattle and 4 560 444 small ruminants were vaccinated in April-June 2023. Vaccination coverage is 78,3 percent for LR and 88,03 percent SR	-	Data shared by the country.
Armenia	- -	-	Active and passive surveillance.	The spring vaccination campaign ended. In total 163 444 LR and 541 507 SR were vaccinated against SAT2 in April-June. 806 799 SR were vaccinated (A, O, Asia1 & SAT2) during this period. SAT2 vaccination started on 8 June.	-	Data shared by the country.
Georgia	-	-	2023 SP-NSP Serosurveillance design under the process.	The spring vaccination campaign has started; in total 453 791 LR and 608 938 SR will be vaccinated/revaccinated. Up to the reporting date 240 660 LR (53	-	Data shared by the country.

				percent of population ¹) and 156 841 SR (26 percent of population) were vaccinated. Current year 345 000 animals (LR/SR) will be vaccinated/ revaccinated against SAT2. AT this moment almost 100 000 animals (LR/SR) are vaccinated. Booster vaccination began on 25 June.		
Iraq	<p>22 outbreaks (WAHIS) have been reported this quarter.</p> <p>510 cases reported in April and May: 157 in sheep and goat, 263 in cattle and 90 in buffalo. Provinces most involved were Babil (n=90), Baghdad (65), Dewania (135), Dhiqar (53), Ninawa (73). 34 deaths registered.</p>	Endemic strains of FMD O, A, Asia-1 and new confirmed SAT2 topotype XIV.		There has been no FMD vaccination since 2021, but there are current efforts to obtain vaccine against SAT2. Vaccination with the Quadrivalent vaccine A,O,Asia-1,SAT2 is planned.		Data shared by the country (report does not include the Kurdistan Region), WAHIS.

¹ *Vaccination coverage was estimated using predicted livestock population sizes for the year 2023 in the EuFMD Vaccine Demand Estimation Model of Foot-and-Mouth disease (FMD), VADEMOS found at <https://www.eufmd.info/vademos>.

Peste des petits ruminants (PPR)

Near East

Country	PPR Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Lebanon				Vaccination campaign for PPR in SR is ongoing.		Data shared by the country.
Palestine	Ten clinically positive cases. In addition 14 samples tested positive to PCR (among 28 samples analyzed).		PPR surveillance and PPR post vaccination monitoring for the last mass vaccination campaign (about 3 000 serum samples).	Vaccination campaign finalized using the PPR vaccine donated by FAO and vaccinated about 80 percent of the sheep herds.		Data shared by the country.

North Africa

Country	PPR Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Libya	No outbreaks reported.		Passive surveillance.			Data shared by the country during SyS workshop in Beirut.
Morocco	No outbreaks reported. (The last one in 2022)			National vaccination strategy adopted every 2 years.		Data shared by the Country during REMESA meeting.

Southeast European Neighborhood

Country	PPR Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
---------	---------------	-----------------------------	--------------	-------------	------------------------	--------

Armenia			Passive surveillance	No vaccination applied.		Data shared by the country.
Iraq	Four outbreaks reported in this period. 260 cases and 39 deaths in Anbar; ten cases and ten deaths in Karbala, two cases in Ninawa.			No vaccination strategy is currently implemented.		Data shared by the country (report does not include the Kurdistan Region).
Republic of Türkiye	No outbreaks detected.	Risk-based control strategy for Thrace is followed to aim for zonal PPR freedom.	In this quarter 7 152 SR were clinically examined in Thrace for PPR and were found negative clinically.	Newborn SR were vaccinated in Anatolia as preventive vaccination; ring vaccination is used as outbreak response; no vaccination in Thrace.		Data shared by the country.

Lumpy skin disease (LSD)

North Africa

Country	LSD Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Libya	First report in cattle (ten cases and three deaths).	Suspected origin: importation of cattle from Chad	Passive surveillance, vector control program.		Limited animal movement; survey in the - surrounding area; monitoring and tracking.	Info shared by the country, WAHIS

Near East

Country	LSD Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Jordan				Vaccination of 1 500 cattle in Jordan Valley.		Data shared from the country.
Lebanon				Vaccination campaign for LSD in LR is ongoing.		Data shared from the country.
Palestine	No outbreaks detected.		Passive surveillance, awareness campaign related to many cases in Israel was done and all quarantine measures was taken.	The private sector was allowed to sell the LSD vaccine and 80 percent of flocks vaccinated using Neethling strain vaccine.		Data shared by the country during SyS workshop in Beirut.

South East European Neighborhood (SEEN)

Country	LSD Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Azerbaijan			Passive and active surveillance.	1 342 937 cattle were vaccinated in April- June 2023, vaccination coverage is 76,6 percent		Data shared by the country.
Armenia			Passive surveillance.	60 807 LR were vaccinated in April- June 2023.		Data shared by the country.
Georgia			Passive surveillance is in place.			Data shared by the country.
Iraq	12 outbreaks reported in this period in Babil, Diyala and Dhiqar with a total of 18 cases.					Data shared by the country (report does not include the Kurdistan Region).
Republic of Türkiye	No outbreaks detected.	The national strategy aims at disease freedom.	In this quarter 14 160 LR were clinically examined in high and low risk areas in Thrace, respectively. All were found negative for LSD clinically.	Annual mass vaccination, with sheep and goat pox vaccine used in the Anatolia region and the Neethling vaccine in the Thrace region.		Data shared by the country.

Rift Valley fever (RVF)

There were no reports of Rift Valley fever this quarter.,

Near East

Country	RVF Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Egypt	No outbreaks detected.		Implementation of risk based active serosurveillance for detection of IgM, through collection of 556 serum samples until now.			Data shared by the country.

North Africa

-

Sheep pox and goat pox (SPGP)

Near East

Country	SGP Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Lebanon				Vaccination campaign in SR is ongoing.		Data shared by the country.
Palestine	22 clinically positive cases, two confirmed by PCR.		Passive surveillance.	Vaccination all flocks around the outbreaks. Vaccination of about 45 percent of sheep population most of them fattening sheep less than 6 months.		Data shared by the country.

North Africa

-

South East European Neighborhood (SEEN)

Country	SGP Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Azerbaijan			Passive surveillance.	472 975 SR were vaccinated in April-June 2023, vaccination coverage is 48,4 percent.		Data shared by the country.
Armenia			Passive surveillance.	42 068 SR were vaccinated in April – June.		Data shared by the country.
Republic of Türkiye	46 outbreaks reported in this quarter. No outbreaks were detected in Thrace.		In this quarter 7 152 SR were clinically examined in Thrace for PPR and were found negative.	All SR were vaccinated in Thrace and in 13 high-risk provinces of Anatolia; additional vaccination occurs in response to outbreaks in Anatolia.		Data shared by the country.
Iraq	24 outbreaks reported in this quarter with a total of 180 cases and five deaths.		Positive cases clinically determined.			Data shared by the country (report does not include the Kurdistan Region)

Summary

Foot and mouth disease

The outbreaks related to the SAT2 topotype XIV are still ongoing in the Republic of Türkiye and Iraq. The neighbouring countries increased their surveillance activities and continued SAT2 vaccination campaigns.

Outbreaks were reported in Egypt, although the serotype responsible is not specified; Libya and Tunisia reported outbreaks due to Serotype O.

Serotypes O, A and Asia 1 continue to circulate in Iraq.

In Near East, serotypes O/PanAsia-2^{ANT-10} was reported in Palestine.

Many of the SEEN countries reported vaccination campaigns against FMD with varying coverage.

Especially, due to the emerging SAT2 outbreaks in the Near East, surveillance data were improved in many countries. The collection of samples from outbreaks and their shipment to FAO/WOAH Reference Laboratories is particularly important, so that phylogenetic and vaccine matching analysis can be performed. Several PMV studies are ongoing in many countries. This can assist in providing evidence on the efficacy of vaccines. There is a need to ensure that vaccines in use are protective against the correct circulating strains.

Peste des petits ruminants

Outbreaks were reported in Iraq and Palestine. Vaccination campaigns are ongoing in Near East and in the Republic of Türkiye.

Lumpy skin disease

Outbreaks of lumpy skin disease were reported in this quarter in Iraq and for the first time in Libya. Vaccination campaigns are ongoing in almost all the countries.

Rift Valley Fever

No Rift Valley outbreaks were reported this quarter.

Sheep pox and goat pox

All outbreaks in Azerbaijan were resolved. Outbreaks are reported in Palestine, in the Republic of Türkiye and Iraq.

Reports of important disease incidents since the end of the reporting period

There is need to continue keeping high the level of attention to FMDV serotype SAT2 that continues spreading in the Republic of Türkiye and Iraq. In Türkiye limited number of new outbreaks have been reported in areas where vaccination has registered some delays. Vaccines have been developed and produced to allow vaccination of susceptible livestock in the affected areas and some neighboring countries. SAT2 specific diagnostic tests, including a lateral flow device (LFD) have been produced and are being made available, where possible. Several ELISA kits and molecular reagents were delivered in support to the diagnostic activities in affected countries and in the neighborhood, to enhance disease surveillance.

LSD was reported for the first time in Libya, the source of the infection has yet to be clarified and no info is available on WAHIS.

More information will be provided in the next FAST report (July-September 2023).