



Food and Agriculture
Organization of the
United Nations



European neighborhood

EuFMD Pillar II

Report on significant
FAST disease events and
information

July - September 2021

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

EuFMD's programme, tools and initiatives

FAST

Foot-and-mouth And
Similar Transboundary
animal diseases

Pillars

eufmd activities

Dt

eufmd digital
transformation

vlearning

eufmd virtual learning
centre

microLearning

eufmd virtual learning

vlc EA

virtual learning centre
for East Africa

Tom

eufmd training
management system

SimExOn

simulation exercises
online

KnowBank

eufmd knowledge bank

GetPrepared

emergency preparedness toolbox

RiskComms

risk communications

SQRA

a method for spatial qualitative
risk analysis applied to fmd.

Pragmatist

prioritization of antigen management
with international surveillance tool

EuFMDiS

european foot-and-mouth disease
spread model

Impact

impact calculator

Vademos

fmd vaccine demand
estimation model

GVS

global vaccine
security

PQv

vaccine
prequalification

PCP

progressive control
pathway

PSO

pcp practitioner
officers

VPP

veterinary
paraprofessionals

PPP

public private
partnership

Sustainable development goals, UN-SDGs. EuFMD's programme has a focus on



Together against wasting resources, think twice before printing.



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Acronyms and abbreviations

ADNS	Animal Disease Notification System
BEF	Bovine ephemeral fever
ELISA	Enzyme-linked immunosorbent assay
FAST diseases	Foot-and-mouth and similar transboundary animal diseases
FMD	Foot-and-mouth disease
GF-TADs	Global Framework for the Progressive Control of Transboundary Animal Diseases
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
REMESA	Mediterranean animal health network
RVF	Rift Valley fever
SGP	Sheep and Goat Pox
SOI	Statement of Intentions between Transcaucasia and neighboring countries
SP	Structural proteins
SR	Small ruminants
TADInfo	Transboundary Animal Disease Information System (Egypt)
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, Middle East, and South East 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.

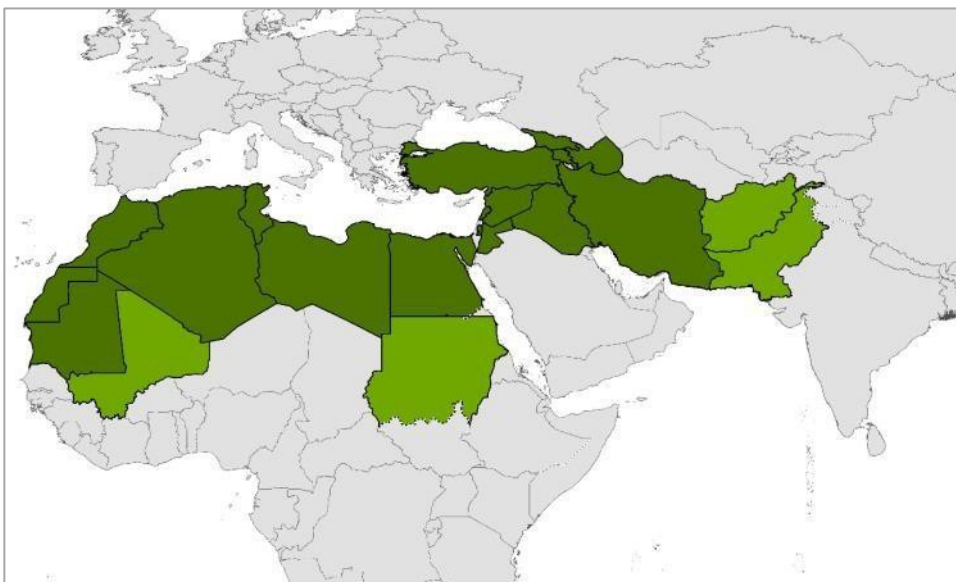
The program focuses on the control of Foot-and-mouth And Similar Transboundary animal diseases (FAST) in the neighboring regions through the improvement of prevention, surveillance, and control. In this context, the FAST quarterly report of significant events provides relevant and regular risk information 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 Middle East, and South East European Neighborhood.

The European neighborhood

The neighborhood 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 (Turkey, Georgia) (Figure 1).

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



EuFMD Member Nations in European neighboring region: Turkey, 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.

Source: Adapted from United Nations World map, May 2019.

Significant events and information

The data reported to the World Organization for Animal Health (OIE), and mentioned in this publication, have been sourced from the World Animal Health Information System (WAHIS) and refer to the period between 1st April and 30th June 2021. Other information has been obtained through the EuFMD activities and networks in the European neighborhood. Information referring to the period before 1st April might be reported when relevant.

Foot-and-mouth disease (FMD)

Middle East

Country	FMD Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Egypt	-	-	Hazard-based surveillance- 4055 farms – no cases detected. Also active surveillance at 71 livestock markets – one FMD suspension detected.	A mass vaccination campaign has been performed on 1,269,931 cattle, 636,812 buffalo, 386,525 sheep and 68,351 goats.	-	Data shared by the country

North Africa

Country	FMD Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Libya	Three outbreaks in farms near Benghazi and around the city of Al-Marg in the East Region, in July 2021. Immediate control measures were taken.	Serotype O	45 blood samples were collected from the targeted herds - sent to the National Veterinary Laboratory in Tripoli. 19 samples were positive by NSP ELISA, and serotyped as O.	So far, 72,341 heads of cattle have been vaccinated.	-	OIE-WAHIS . ProMED (Archive Number: 20210725.8540912). Data shared by the country
Algeria	-	-	-	Annual vaccination campaign is ongoing since mid-September.	-	Data shared by the country

South East European Neighborhood (SEEN)

Country	FMD Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Turkey	3 outbreaks (2 in small ruminants, 4 in cattle) were reported in Anatolia in the 3 rd quarter of 2021. Only 1 outbreak was reported in Kars province bordering Georgia, Armenia, Azerbaijan, and Iran.	Serotype O - sublineage O/ PanAsia-2/Qom15 and PanAsia-2/ANT10.	For clinical surveillance 19,260 animals were examined for FMD in the high-risk area, Istanbul, and 34,740 in the low-risk areas, Edirne, Çanakkale, Tekirdağ and Kiriklarelili. 3,597 sera were collected and tested by NSP ELISA as part of the national FMD serosurveillance – to estimate NSP prevalence and evaluate vaccine performance. Results expected by the end of the year.	Autumn Preventive and 10 PD ₅₀ for emergency vaccination has been performed in the surveillance zone for all susceptible species planned from 15 th September – 15 th November. The campaign targets only large ruminants in Anatolia and both large and small ruminants in Thrace, including a booster vaccination for primo-vaccinates.	-	Data shared by the country, National Database system, VETBIS.
Azerbaijan	-	-	Passive and active surveillance. Azerbaijan plans to conduct a post-vaccination serological survey for large and small ruminants after the autumn vaccination campaign.	138,028 cattle and 277,968 small ruminants were vaccinated in July-August. Vaccine coverage for spring vaccination campaign is 95.3% for cattle and 67.7% for small ruminants.	-	Data shared by the country - National Veterinary Authority
Armenia	-	-	Passive and active surveillance. A post-vaccination serological survey for large and small ruminants after the autumn vaccination campaign.	371,864 large ruminants and 112,491 small ruminants were vaccinated in June - August 2021 in all regions.	-	Data shared by the country
Georgia	-	-	Passive and active surveillance has been conducted. In this reporting period 3 suspected samples were submitted to the State Laboratory of Agriculture, but all were negative. The NSP serosurveillance action plan is under development. SP serosurveillance has been conducted, results of which are pending.	Spring prophylactic vaccination is complete. Autumn prophylactic vaccination has started. During the reporting period 574,135 animals were vaccinated: 204,524 LR and 282,861 SR.	-	Data shared by the country
Iran (Islamic Republic of Iran)	19 outbreaks in small ruminants, and 60 outbreaks in large ruminants in the third quarter.	Circulating lineages: O PanAsia-2/ANT10 and A Asia/Iran-05-Far-11. Serotype Asia 1 has not been detected in this quarter.	Passive surveillance	The Iran Veterinary Organization (IVO) indicated that 1,148,196 large ruminants and 3,326,988 small ruminants were vaccinated against FMD with trivalent vaccines (O, A, Asia1) which were either locally produced or imported. The vaccination of nomadic animals was done free of charge.	-	Data shared by the country

Peste des petits ruminants (PPR)

Middle East

Country	PPR Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Israel	5 cases of PPR were reported in Haifa, and 240 cases in goats and 150 cases in sheep in the Northern region, in June 2021. Also, a report of cases in the Central District in April 2021.	-	-	-	-	ProMED (archive number: 20210610.8439348)
Palestine	Since 1 January 2021, no PPR cases have been reported.	-	-	In March 2021, Palestinian veterinary services received a donation of 900,000 doses of PPR vaccine from FAO/ PPR secretariat. More than 95% of the small ruminant population was vaccinated in a short time.	-	Data shared by the country
Egypt	-	-	Hazard-based surveillance- 4055 farms. Also active surveillance at 71 livestock markets – no cases detected. Sero-surveillance for post vaccination monitoring - 1150 samples (selected small ruminants will be sampled before and after vaccination one-month apart).	A mass vaccination campaign started on 18/09/21. Total number vaccinated so far: 312,864 sheep and 67,610 goats.	-	Data shared by the country
Sudan	-	-	-	A total of 490,908 animals have been vaccinated for PPR in June-August 2021.	-	Data shared by the country

North Africa

Country	PPR Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Algeria	-	-	-	Vaccination campaign is ongoing.	-	Data shared by the country
Morocco	An outbreak of PPR was confirmed on a farm in Casablanca-Settat, with 5 cases, at the end of September 2021, confirmed by RT-PCR.	-	Domestic control measures include surveillance within and outside the containment and or the protection zone.	Domestic control measures include vaccination in response to the outbreak (s). A total of 1400 sheep were vaccinated.	-	OIE WAHIS (Report ID: IN_151982)

South East European Neighborhood

Country	PPR Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Turkey	Two outbreaks of PPR recorded in this quarter; no outbreaks in provinces bordering with Georgia, Armenia, Azerbaijan, and I.R Iran.	A risk-based control strategy for Thrace has been developed to aim for zonal freedom.	Serosurveillance is currently conducted for estimation of antibody levels and evaluation of immunity in the population. Passive surveillance for disease reporting is conducted in the Thrace region. 21,546 small ruminants were clinically examined for PPR	Newborn non-vaccinated small ruminants were vaccinated in Anatolia as preventive vaccination; ring vaccination was used as outbreak response. Due to preparation for zonal freedom, no vaccination against PPR is conducted in Thrace.	-	Data shared by the country, National Database system, VETBIS.
Georgia	-	-	Passive and active surveillance has been conducted. Post vaccination serosurveillance has been conducted. 100 samples were collected, out of them 84% were positive.	-	-	Data shared by the country
Iran (Islamic Republic of Iran)	The incidence of PPR has decreased during the last year, mainly due to implementing mass vaccination campaign from 1 st of April 2021. 94 outbreaks were reported in this quarter.	All sequenced circulating viruses were lineage 4.	Passive surveillance	Mass vaccination was implemented using a domestic vaccine from 1 st April 2021, which continues. 33,048,171 sheep and goats were vaccinated.	-	Data shared by the country

Lumpy skin disease (LSD)

Middle East

Country	LSD Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Egypt	-	-	Hazard-based surveillance- 4249 farms – 6 LSD suspensions detected on Beni Suef Governorate. Also active surveillance at 71 livestock markets – no cases detected.	A mass vaccination campaign has been performed on 1,678,611 cattle.	-	Data shared by the country
Sudan	-	-	-	A total of 750 animals have been vaccinated for LSD in June-August 2021.	-	Data shared by the country

South East European Neighborhood (SEEN)

Country	LSD Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Azerbaijan	-	-	Passive surveillance	156,052 cattle were vaccinated in July-August 2021, vaccine coverage is 87.1%	-	Data shared by the country
Armenia	-	-	Passive surveillance	221,415 LR were vaccinated with "POX and LSD" vaccine in high-risk areas since May.	-	Data shared by the country
Turkey	Only 1 outbreak was reported in Tokat in this period	A national strategy has been conducted for gaining free status for LSD in Turkey. Additionally, a project has been implemented for surveillance and vaccination as well as to improve capacity.	42,480 LR were clinically examined for LSD in the Thrace region. Passive disease reporting is also implemented.	Annual mass vaccination, with a 3–4-time dose sheep and goat pox vaccine used in Anatolia region. Neethling vaccine is used in Thrace region.	-	Data shared by the country, VETBIS
Georgia	-	-	Passive surveillance in place	Prophylactic vaccination has been conducted in risk zones with a total of 192,800 LR vaccinated. In the reporting period 107,360 animals were vaccinated.	-	National Food Agency.
Iran (Islamic Republic of Iran)	There have been 46 outbreaks in cattle reported in this quarter, and up until now, the disease condition has been stable.	-	Passive surveillance	In this quarter 321,175 bovines were vaccinated with a heterologous vaccine (RM-65 and Gorgan pox virus vaccines) and 354,648 bovines were vaccinated with a homologous vaccine (Neethling vaccine). Vaccination is free of charge for villagers and nomadic farmers, while payment is required for animals of large-scale dairy farms. Mass vaccination in high-risk areas for the large ruminant population is conducted annually from last of winter to early spring.	-	Data shared by the country

Rift Valley fever (RVF)

Middle East

Country	RVF Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Egypt	-	-	<p>Hazard-based surveillance- 4055 farms. Also active surveillance at 71 livestock markets – no cases detected.</p> <p>Risk-based surveillance plan – 1148 samples collected from highest risk areas - e.g. border governorates with neighbour countries.</p>	A mass vaccination campaign has been performed on 1,269,931 cattle, 636,812 buffalo, 386,525 sheep and 68,351 goats.	-	Data shared by the country.

North Africa

Country	RVF Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Libya	4 outbreaks identified (on the basis of serological tests) on four farms in Tripoli, An Nuqat al Khams and Al Marqab as part of follow-up surveillance investigations in June 2021.	-	Target serosurveillance in high risk areas depending on suitability of vectors, animal movement, and detection of abortion as a follow up investigation was conducted in the northern region – 863 samples were collected from 54 farms– 4 samples gave a positive result from four farms.	-	Further investigation on the farms with sero-positive samples are undergoing, the samples are to be collected and analyzed from all animals of the four farms.	ProMED (Archive Number: 20210924.8697777). Data shared by the country.

Sheep and goat pox (SGP)

Middle East

Country	SGP Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Israel	An outbreak of sheep pox was confirmed in June 2021 in Lakish in the Southern District.	-	-	-	-	ProMED (Archive Number: 20210613.8443037)
Egypt	-	-	Hazard-based surveillance- 4055 farms. Also active surveillance at 71 livestock markets – no cases detected.	A mass vaccination campaign has been performed on 506,556 sheep and 68,606 goats.	-	Data shared by the country
Sudan	-	-	-	A total of 364,901 animals have been vaccinated for sheep pox in June-August 2021.	-	Data shared by the country

North Africa

Country	SGP Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Algeria	15 outbreaks in small ruminants were reported in the municipalities of Fkirina, Ain M'lila, Oum El Bouaghi-wilayate of Oum El Bouaghi. Other outbreaks in the surrounding Wilayate were also reported.	-	Preventive measures were taken by the local veterinary service.	A massive vaccination campaign around the officially reported outbreaks is in place. About 10,000 heads were vaccinated.	-	ProMED (Archive Number: 20210925.8698677) Source: Annasr Online
Morocco	74 outbreaks of SGP.	519 cases with 200 deaths.	Sanitary inspections of sensitive herds in animal gathering points such as markets and slaughterhouses.	Vaccination was performed in response to the outbreaks.	-	Data shared by the country

South East European Neighborhood (SEEN)

Country	SGP Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Azerbaijan	-	-	Passive surveillance	25,622,713 small ruminants were vaccinated in July-August 2021	-	Data shared by the country
Turkey	12 outbreaks reported.	-	Passive surveillance. In the Thrace region 21,546 small ruminants were clinically examined for sheep and goat pox (&PPR).	All small ruminants are vaccinated in Thrace, and vaccinated in response to outbreaks in Anatolia	-	Data shared by the country
Iran (Islamic Republic of Iran)	10 outbreaks of goat pox and 139 outbreaks of sheep pox	-	Passive surveillance	In this quarter, 14,416,984 sheep and 5,330,039 goats have been vaccinated against SGP using a risk-based approach, using locally produced vaccines with RM65 and Gorgan strains for sheep and goats respectively. Vaccination is free of charge and conducted risk-based and as a response to outbreaks.	Outbreaks are especially found in unvaccinated animals	Data shared by the country

Bovine ephemeral fever (BEF)

Middle East

Country	BEF Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Israel	Cases of BEF have been reported on 9 dairy farms in the southern coast region [Hadarom region] in August 2021.	-	-	Preventive vaccinations against BEF are voluntary in Israel.	-	ProMED (Archive Number: 20210807.8577245)

South East European Neighborhood

Country	BEF Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Iran (Islamic Republic of Iran)	41 outbreaks of BEF were reported in this quarter.	-	Passive surveillance	31,970 cattle were vaccinated against bovine ephemeral fever with an inactivated imported vaccine in a high-risk area.	-	Data shared by the country

Conclusions

There was reduced information received from the Middle East and North Africa this quarter.

Foot and mouth disease

Lineages A/ASIA/Iran 05 and O/ME-SA/PanAsia-2 continue to circulate in the South East European neighbourhood, reported in both I.R Iran and Turkey in the last quarter. There is a requirement to ensure that vaccines in use in these and neighbouring countries are protective against these circulating strains. Outbreaks of serotype O occurred in Libya, although the strain is unknown. Surveillance data is lacking in many countries and therefore the collection of samples from outbreaks and their shipment to FAO/OIE Reference Laboratories is particularly important, so that phylogenetic and vaccine matching analysis can be performed. This can assist in providing evidence on the origin of the virus and on the efficacy of vaccines.

Peste des petits ruminants

Outbreaks were reported in Israel and Palestine, Turkey, and the Islamic Republic of Iran (lineage 4 confirmed in Iran). These countries are implementing vaccination campaigns and perform surveillance activities.

Lumpy skin disease

The disease has been reported in the Islamic Republic of Iran and Turkey this quarter. However, mass vaccination is performed in high-risk areas. Vaccination has also been reported this quarter in Azerbaijan, Armenia, and Georgia.

Rift Valley Fever

According to a ProMED report, four outbreaks of Rift Valley fever were reported in Libya, which is dealing with an ongoing apparent introduction of the virus since December 2019. Testing and investigations are ongoing on positive farms.

Sheep and goat pox

Israel, Algeria, Turkey, and the Islamic Republic of Iran reported a small number of outbreaks of sheep/goat pox this quarter. These countries report vaccination against sheep and goat pox to high animal numbers, with outbreaks more likely in unvaccinated animals. Azerbaijan and Jordan also reported vaccinating small ruminants against SGP.

Bovine ephemeral fever

41 outbreaks have been reported in this quarter in the Islamic Republic of Iran (much higher than reported last quarter), However, vaccination campaigns are carried out in high-risk areas. Reports of cases of BEF in August 2021 in Israel are also noted, where vaccination is voluntary.



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