



Food and Agriculture
Organization of the
United Nations



European neighborhood

EuFMD Pillar II

Report on significant
FAST disease events and
information

April - June 2021

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

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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
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
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.

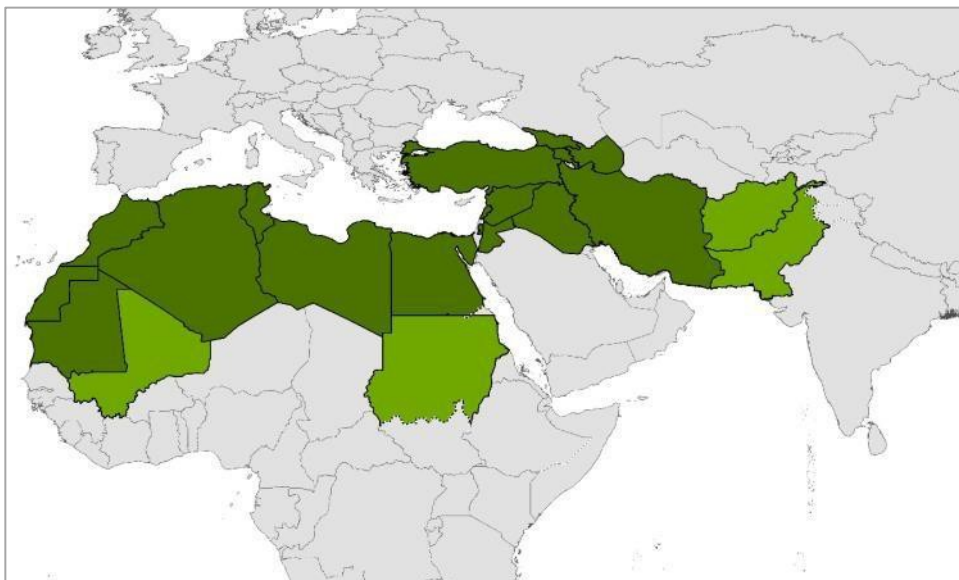
The program focuses on the control of foot-and-mouth and similar transboundary animal diseases (FAST) in the neighboring regions through the improvement of prevention, surveillance, and control. In this context, the FAST quarterly report of significant events provides relevant and regular risk information 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
Israel	An outbreak of FMD has been reported in Israel's northern district (Yodfat, Lower Galilee). As of the 2 nd June, no further clinical cases have been observed	O/ME-SA/PanAsia-2	-	-	-	ProMED 11/06/21 via Kimron Veterinary Institute (ProMED archive number: 20210611.8441061)
Syria	There was a suspected FMD outbreak in goat herds in Ma'areen village, Latakia/Lattakiya (Al Ladhqiyyah) Governorate in northwest Syria.	-	-	Vaccination of the entire livestock population in the affected and surrounding villages was performed. Many animals were from unknown sources (e.g. imported from local markets or close neighboring governorates) and therefore their vaccination history was unknown.	-	ProMED 22/04/21 (ProMED archive number: 20210422.8320257)
Lebanon	-	-	-	A FMD mass vaccination campaign, for dairy cattle, sheep and goats was launched in June 2021 and is ongoing. The FMD vaccines were provided as a donation from the French Embassy.	-	Data shared by the country.
Egypt	Four confirmed notifications of outbreaks reported since Jan 2021: 2 in Dakhalia Governorate in Jan and Feb 2021, one in Sohag Governorate in Feb 2021 and one in Kafrelshikh Governorate in April 2021.	Serotype A, A/AFRICA/G-IV	-	-	-	Data shared by the country.
Jordan				According to the veterinary authority 10,000 large ruminants and 402,350 small ruminants were vaccinated against FMD during this quarter.		Data shared by the country

North Africa

Country	FMD Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Libya	<p>Seven outbreaks occurred in western (two) and eastern (five) Libya, at end of 2020 and beginning 2021. (Reported in the October-December 2020 report).</p> <p>45 serum samples were received in July from Almarj City (Eastern Libya) from suspected cases in cattle. These samples were tested in the Veterinary Central Lab in Tripoli, and 19/45 samples were FMD seropositive.</p>	<p>Serotype A</p> <p>Serotype O</p>	Serosurveillance currently being implemented with blood samples collected from animals (10% of the size of the herd or 100% if the herd located at the border areas).	Vaccines currently in use are Aftomune PUR (M.C.I) Serotypes O and A (O Manisa-03039 and A22). All cows to be vaccinated with two doses per year every six months. Sheep are to be ring vaccinated upon laboratory confirmation of infection.	All cases were recorded in high animal density areas and common pasture.	Data shared by the country

South East European Neighborhood (SEEN)

Country	FMD Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Turkey	Nine outbreaks (3 in small ruminants, 6 in cattle) were reported in Anatolia in the second quarter of 2021. No outbreaks were reported in provinces bordering Georgia, Armenia, Azerbaijan, and Iran.	Serotype O - sublineage O/PanAsia-2/Qom15	Clinical active surveillance is conducted in 8 provinces bordering with Georgia, Armenia, Azerbaijan and Iran. NSP and SP serosurveillance will be implemented in Autumn.	Spring preventive vaccinations were finalised by on 15th May. The campaign targets only large ruminants in Anatolia and both, large and small ruminants in Thrace, including a booster vaccination for primo-vaccinates. Min. 6PD50 potency vaccines are used for preventive and 10PD50 for emergency vaccination and in the surveillance zone for all susceptible species.	Iran reported an increased number of outbreaks in West Azerbaijan province resulting in an increased risk for Turkey	Data shared by the country, National Database system, VETBIS.
Iraq	An outbreak of FMD has been reported by buffalo breeders in	-	-	A vaccination campaign of buffalo herds has been launched that to	-	ProMED 12/06/21 (ProMED archive)

	Diyala governorate, with a high number of deaths reported			last 4 weeks, starting from 1 Jun 2021		number: 20210612.8443121)
Azerbaijan	-	-	Passive and active surveillance. Azerbaijan plans to conduct a post-vaccination serological survey for large and small ruminants after the autumn vaccination campaign.	2,211,930 cattle and 4,873,747 small ruminants were vaccinated in January-June. Vaccine coverage is 89.7% for cattle and 64% for small ruminants.	-	Data shared by the country - National Veterinary Authority
Armenia	-	-	-	456,578 large ruminants and 393 small ruminants were vaccinated in March-May 2021 in all regions.	Risk increases with grazing movements in spring. The current FMD outbreak in Iran (upsurge in sub-lineage A Asia/Iran-05-Far-11 outbreaks) is a risk.	Data shared by the country
Iran (Islamic Republic of Iran)	52 outbreaks in small ruminants, and 84 outbreaks in large ruminants in the second quarter. Increased number of cases reported in the West Azerbaijan province in April 2021.	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	According to the Iran Veterinary Organization (IVO) 1,040,188 large ruminants and 15,034,436 small ruminants were vaccinated against FMD between 1st March and 1st June 2021 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	Clinical cases of PPR were reported in Melea, Hazafon, Israel on 14 April 2021, affecting mainly young lambs in a herd of 900 animals. Laboratory confirmed by reverse transcription-polymerase chain reaction (RT-PCR).	-	-	-	-	ProMED 16/04/2021 via Kimron Veterinary Institute, Virology laboratory (national laboratory). (ProMED archive number: 20210416.8311502)
Egypt	One confirmed outbreak in Behaira Governorate in March 2021.	-	-	-	-	Data shared by the country.
Jordan				According to the veterinary authority 320,300 small ruminants were vaccinated against PPR during this quarter.		Data shared by the country.

South East European Neighborhood

Country	PPR Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Turkey	4 outbreaks recorded in this quarter; no outbreaks in provinces bordering with Georgia, Armenia, Azerbaijan and Iran.	-	Serosurveillance is currently conducted for estimation of antibody levels and evaluation of immunity in the population.	Small ruminants have been vaccinated since 2016; ring vaccination used as outbreak response. Due to preparation for zonal freedom, no vaccination against PPR is conducted in Thrace.	A risk-based control strategy for Thrace has been developed to aim for zonal freedom.	Data shared by the country, National Database system, VETBIS.
Iran (Islamic Republic of Iran)	The incidence of PPR has decreased during the last year, mainly due to improved availability of vaccines produced by two companies in Iran. In the reporting quarter, 70 outbreaks were reported between 1 st March and 1 st June 2021.	All sequenced circulating viruses were lineage 4.	Passive surveillance	Mass vaccination implemented by use of a domestic vaccine from 1st April 2021 and IVO intends to continue mass vaccination for three successive years. 17,798,239 sheep and goats were vaccinated.	Vaccination was implemented in high risk areas - all the epi-units adjacent to wildlife and also after outbreaks.	Data shared by the country

Lumpy skin disease

Middle East

Country	LSD Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Lebanon	-	-	-	A vaccination campaign was launched in December 2020. 40,000 doses of LumpyShield Vaccine were provided to the animal resources directorate (ARD) to vaccinate dairy cattle resident at all borders of the country. Ring vaccination was applied within the country where LSD suspected cases were reported. Approximately 30,000 doses of LSD vaccine were used to immunise subsistence farm systems and small farms.	-	Data shared by the country
Egypt	Three confirmed notifications of LSD - two in New Valley Governorate Mar/ April 2021 and one in Benisuef in May 2021.			Since April 2021 the Neethling strain of LSD was used for vaccination.		

South East European Neighborhood (SEEN)

Country	LSD Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Azerbaijan	-	-	Passive surveillance	1,974,970 cattle were vaccinated, vaccine coverage is 80.1%	-	Data shared by the country
Turkey	There has not been LSD detected in this quarter	-	-	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
Iran (Islamic Republic of Iran)	There have been 82 outbreaks in cattle reported in this quarter, and up until now, the disease condition has been stable.	-	Passive surveillance	In this quarter, 449,987 bovines were vaccinated with a heterologous vaccine (the RM-65 and Gorgan pox virus vaccines) and 818,456 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 are conducted annually from last of winter to early spring.	-	Data shared by the country

Rift Valley fever (RVF)

There were no significant events reported for Rift Valley fever this quarter.

Sheep and goat pox (SGP)

Middle East

Country	LSD Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Jordan	Three confirmed notifications of LSD - two in New Valley Governorate Mar/ April 2021 and one in Benisuef in May 2021.			In this quarter, 110,740 small ruminants were vaccinated against SGP.		Data shared by the country

South East European Neighborhood (SEEN)

Country	SGP Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Azerbaijan	-	-	Passive surveillance	450,584 small ruminants were vaccinated	-	Data shared by the country
Turkey	22 outbreaks reported.	-	-	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)	27 outbreaks of goat pox and 280 outbreaks of sheep pox	-	Passive surveillance	In this quarter, 8,959,985 sheep and 3,018,406 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)

South East European Neighborhood

Country	BEF Outbreaks	Epidemiological information	Surveillance	Vaccination	Other risk information	Source
Iran (Islamic Republic of Iran)	8 outbreaks of BEF were reported in this quarter.	-	Passive surveillance	In this quarter, 88,182 cattle were vaccinated between Mar – June 2021. 44,182 cattle were vaccinated against bovine ephemeral fever with an inactivated imported vaccine in a high risk area.	-	Data shared by the country

Conclusions

Foot and mouth disease

Lineages A/ASIA/Iran 05 and O/ME-SA/PanAsia-2 continue to circulate in the South East European neighbourhood, and there is a requirement to ensure that vaccines in use in neighbouring countries are protective against these. Additionally, cases due to A/AFRICA/G-IV have been recorded in Egypt. The collection of samples from outbreaks in many countries where data is lacking and their shipment to the FAO/OIE Reference Laboratory 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 Turkey and the Islamic Republic of Iran, due to lineage 4 (confirmed in Iran). These countries are implementing a mass vaccination campaign and perform surveillance activities. Cases have also been reported in Egypt and Israel.

Lumpy skin disease

The disease has been reported in Iran and Egypt this quarter, however mass vaccination is performed in high risk areas. Vaccination is also performed in Azerbaijan, Lebanon and Turkey.

Rift Valley Fever

There were no outbreaks or significant events reported in this quarter regarding Rift Valley fever.

Sheep and goat pox

A small number of outbreaks were recorded this quarter in Turkey and the Islamic Republic of Iran, although these countries report vaccination against sheep and goat pox to high animal numbers, with outbreaks more likely in unvaccinated animals. Azerbaijan also reported vaccinating small ruminants against SGP.

Bovine ephemeral fever

Vaccination campaigns have been carried out in the Islamic Republic of Iran and 8 outbreaks have been reported to date.



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