



Food and Agriculture
Organization of the
United Nations



In the shadow of Sheep Pox and Goat Pox and Peste des Petis Ruminants

Risk pathways and biosecurity, identifying problems and advancing solutions

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

2nd SGE for PPR and SPGP in Europe, 29 June 2026

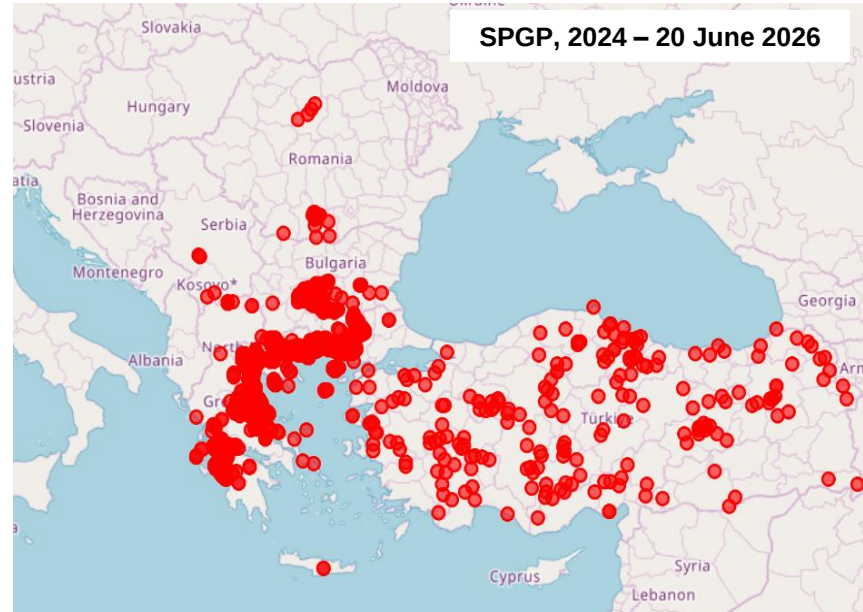
Old & New challenges for the region

SPGP, 2013 - 2018



- **SPGP** – 2013 (BG), 2013-2018 (GR), endemic in TR

SPGP, 2024 – 20 June 2026



- **SPGP** - 2024 (GR, BG), 2025 (GR, BG, SR, NM, RO), 2026 (GR, BG, NM, RO), endemic in TR



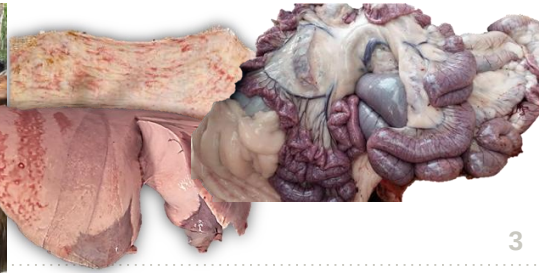
Old & New challenges for the region



- **PPR** – 2018 (BG), endemic in TR



- **PPR** –2024 (GR, RO, BG), 2025 (RO, HU, AL, XK), 2026 (HR, AL, RO), endemic in TR



Emergence of PPR in Europe – observations

- Mild clinical symptoms, low mortality???
- The extent of the areas impacted is mainly due to delays in PPR diagnosis during the early stage of the outbreak associated with
 - underreporting
 - early misdiagnosis at a local level

Country	IE in 2024, n	IE in 2025, n	IE in 2026, n	Total IE	Sheep			Goats		
					susceptible	cases	death	susceptible	cases	death
Albania		14	3	17	1062	182	32	1422	345	159
Bulgaria	1			1	1769	25	4			
Croatia		3	3	6	184	27		18	3	
Greece	89			89	32122	5312	606			
Hungary		3		3	3246	433	30			
Kosovo		2		2	70	20	20	183	8	3
Romania	67	1		68	226889		13717			
Türkiye	18	7		25	1034	282	122			

PPR Situation in the Region 2024 - May2026 (ADIS system)



Measures against SPGP & PPR in the EU

Regulation (EU) 2016/469 (AHL) and Commission Delegated Regulation (EU) 2020/687



Commission Delegated Regulation (EU) 2023/361

VACCINATION

- SPP & GTP – last vaccination was more than 30 years ago
- PPR – no experience in the EU

Till end of 2023

- early detection in the “**High risk areas**”,
- outbreaks quickly and effectively controlled.

Since 2024

- Outbreaks detected beyond the “**high risk area**”;
- In most of the cases **not timely detection/reporting of primary and secondary outbreaks**;
- **Low acceptance and inefficient implementation** of the measures imposed (**movement bans, stamping out**);
- **Animal movements (legal and illegal) are main route of spreading**;
- **Weak biosecurity** of farms and during transport.



Transmission

	SPGP	PPR
Direct contact	★★★★★	★★★★★
Aerosol (short range)	★★★★	★★★★
Fomites	★★★★★	★★
Scabs (environment)	★★★★★	
Animal movement	★★★★★	★★★★★
Vectors	★	



Persistence

Long persistence of SPPV and GTPV has influence on transmission

matrix	survival time
Scabs	6 months
Wool/hairs	3 months
Shaded pens	6 months
Environment, pastures	6 months



PPR virus does not persist long in the environment! It relies on continuous transmission between animals!

matrix	survival time
Environment	short-lived outside the host, usually surviving hours to a few days
organic material	• to several days in cool, moist, shaded conditions. • In contaminated bedding, feed, or surfaces, it is typically <72 hours under field conditions.



Movements of susceptible animals

In peace time

- Authorized
- Not authorized
- Easter
- St. George day (May)
- Kurban festival
- August



During outbreak

- Standstill is of greatest importance



Biosecurity

Segregation

Cleaning

Disinfection

at farm



do not let in

during transport



do not spread

open grazing



do not get &
do not spread

during outbreak



do not let out

External biosecurity - all the actions to prevent contact between the farm and the outside world

Internal biosecurity - preventing the spread of disease within a herd or farm and to other farms

Timing of in detection/notification of suspicious... and speed of outbreak management...

High risk periods

1st

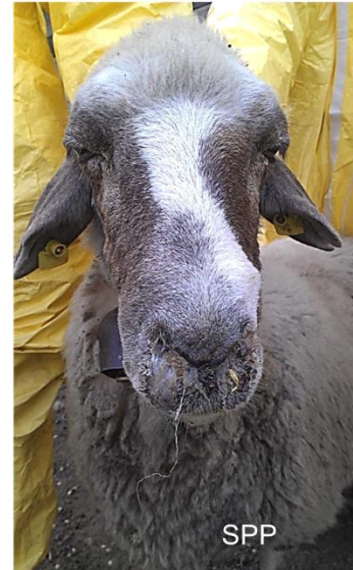
2nd

The period between the introduction of an infection and the first detection of the infection

The period between the first animal has been detected as infected and the establishment of measures to prevent virus spreading

The length of the 1st HRP will affect the size of the epidemic

Contribute to reduce number of Secondary Outbreaks



Differential diagnosis is essential for early detection

The efficiency of surveillance in the context of in a Small Ruminant–Dominated Setting!

Passive surveillance

- Best for early detection of SPGP&PPR
- Regular meetings with farmers may significantly improve the level of reporting and acceptance of control measures!
- Clear, targeted messaging on early detection and reporting, explaining the purpose, goals, and expected outcomes of control measures—what happens if they are followed or not—and the implications of strategies such as stamping out, preventive culling, and vaccination.

Active surveillance

- Clinical for SPGP & PPR
- Serological for PPR
 - Recommended in PZ, SZ, FRZ and beyond
 - to understand the real size of infected area

Critical points during outbreak management

Do not take FAST out....

- Objections against stamping out
- Social media
- The speed of depopulation and decontamination
- Cleaning and disinfection
- Restocking



Epidemiological investigations and traceability

investigate the source of infection and modes of transmission.

- What is the **epidemiological situation**?
- **When and how** did the SPGP/PPR virus reach the farm/area?
- **Where could the SPGP/PPR virus go to** from the infected farm/area?

Do we get the answers of the questions above for every single outbreak?



SPGP/PPR virus + the human factor...



- uncontrolled animal movements
 - cultural practices,
 - high density of sheep and goats,
 - “good” on-farm activities
 - delayed reporting
 - low acceptance of control measures
-
- not using additional tools for disease control...if measures implemented so far, would show to be difficult to control PPR/SPGP

Vaccination as a tool

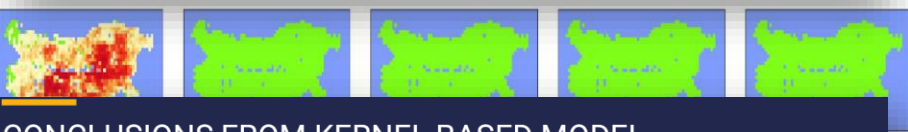
Approved: 28 January 2026

DOI: 10.2903/j.efsa.2026.9928

SCIENTIFIC REPORT

efsa JOURNAL

Sheep and goat pox: vaccines and vaccination scenarios to control the epidemics in Greece and Bulgaria in 2025



CONCLUSIONS FROM KERNEL BASED MODEL

- rapid detection and culling of infected farms (30 days after virus introduction) sufficient to control epidemics in 1–2 years.
- Restricting **vaccination to only the four initially affected regions** created a risk of **viral escape**, unless strict 20-km movement controls within surveillance zones were rigorously enforced.
- **Nationwide vaccination** further reduced the likelihood of viral escape and achieved better containment outcomes than detection and culling alone.
- **A two-year vaccination campaign**, when combined with standard detection and culling, was predicted to eliminate SGP from Bulgaria, achieving eradication one year sooner than strategies without vaccination.
- In scenarios lacking insufficient control measures, vaccination became essential for epidemic control, with at least a three-year campaign required for reliable elimination.
- Under vaccination-only strategies, elimination was projected to take 2–3 years, highlighting the **importance of combining vaccination with other control measures** (early detection, rapid culling, and strict movement restrictions) for optimal outcomes.

17

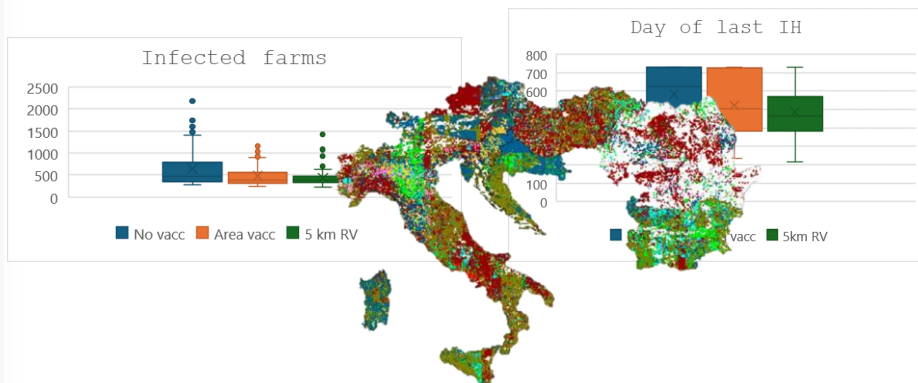


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EuFMDiS European Foot-and-Mouth Disease Spread model

- Simulation for Bulgaria for SPGP
- Compare control strategies with and without vaccination



- The model is available also for PPR

SPGP and PPR resources available

Available on EuFMD's toolbox

- EuFMD has made available **learning** and **microlearning** resources that can help animal health workers in preparedness and response to SPGP and PPR outbreaks
- Resources available in the <https://padlet.com/eufmdFAST/toolbox-for-fast-diseases-lrhxjry947a6fki2>
- EuFMD can provide support to translation to the countries.

(*) Available in English, Bosnian, Bulgarian, Greek, Hungarian, Macedonian, Montenegrin, Romanian, Serbian and Turkish

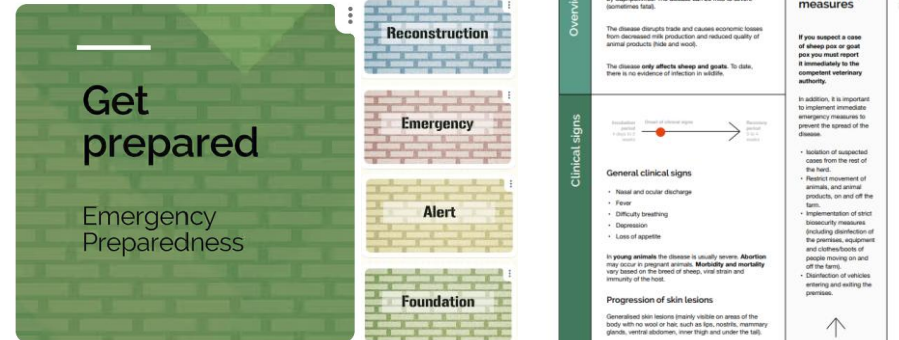
Posters

Awareness posters available for both SPGP and PPR (*)



Job aids

Providing support to veterinarians in the field

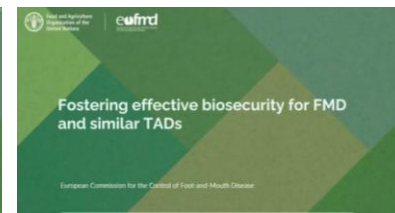
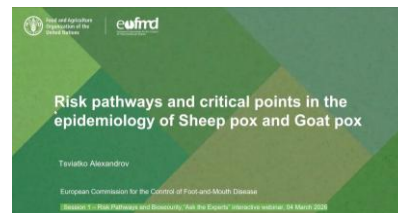


Webinars and courses

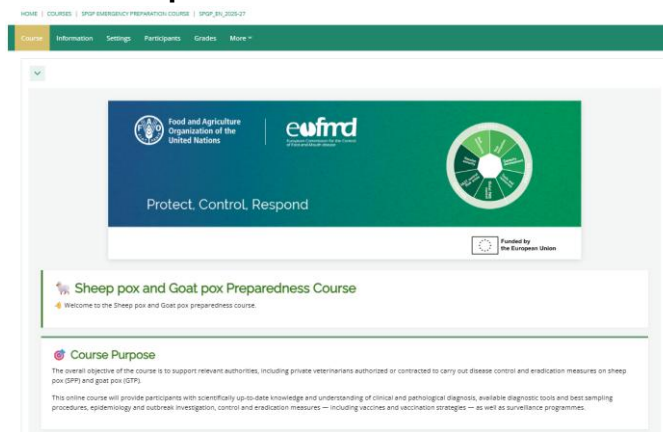
Available on EuFMD's virtual Learning site

- EuFMD has organized **three** webinars to enhance **SPGP preparedness** and **two Biosecurity** webinars;
 - Available on <https://eufmdlearning.works/course/view.php?id=466>
- The **SPGP Preparedness course**, developed by FAO VLC, has been made available on EuFMD's virtual Learning platform for all the Member Nations during 2025-27
 - The course cover pathogenesis, clinical signs, diagnostics, biosecurity, outbreak investigation and control measures.
 - 12 hours of study.
 - For official veterinarians and veterinarians in the field.
- Contact EuFMD-Admin@fao.org for any further information

Webinars



SPGP Preparedness





Thank you !

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FAO Four Betters



**PROTECT
RESPOND
CONTROL**

2023-2027 Strategy
**Get prepared
Move FAST**



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