

Information about outbreak of Sheep & Goat Poxvirus in Spain



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CVO Informal Meeting Prague
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Situation of SPPV in Spain up to date

- **Detection of SPV in Spain** after more than 50 years since eradication.
- At the moment 9 confirmed outbreaks: two in Municipality Benamaurel (Granada; 2022/1 & 2022/5), one in Cúllar (Granada; 2022/2) and six outbreaks in Villaescusa de Haro (Cuenca; 2022/3,4,6-9).





Outbreak 2022/1: Chronology and description of the outbreak

- 15th September 2022: MAPA receives from OVS of Andalucía (south Spain) a communication of the detection of unusual skin lesions on a sheep holding in the municipality of Benamaurel, in the province of Granada.
- The lesions are compatible with Sheep and Goat Poxvirus (SP/GTPV) and the case is dealt with urgently.
- It is a breeding sheep holding for meat production with a census of 314 sheep and 11 goats. It is a holding with extensive production system where animals graze in own pastures.
- On the 16th in the morning, before having the results and due to the seriousness of the suspicion, MAPA organized a meeting with all Regional OVS to inform and highlight the importance of enhancing awareness and biosecurity in the whole country.



Map: location of the suspect farm in Granada



Outbreak 2022/1: Official visit and immediate measures during suspicion phase

- Official visit of the OVS to the farm on Sept 15th, with detection of diverse skin lesions in 50 clinically affected sheep, including 30 dead animals in recent days.
- Official samples are sent urgently to the NRL (Central Veterinary Laboratory of MAPA, in Algete, Madrid).
- Official immobilization of the suspect farm and two other close-by farms, one goat farm (40m) and a lamb assembly centre (200m), due to the proximity to the suspect farm, until visited, sampled and confirmed negative.
- Immediate traceability of risk movements form suspect farm, the last registered movement on 10th of June 2022 to a fattening farm in Baza, Granada. This holding has been investigated by OVS without detection of symptoms or clinical lesions.
- Traceability of inward/outward movements of the lamb assembly holding. All identified risk-contacts holdings are immobilized immediately until official investigation of each of them is carried out.



Outbreak 2022/1: Laboratory analysis and results

16/09/2022

First results from the NRL Algete

Positive results to generic RT-PCR, able to detect SP/GTPV, in 27,8% samples of whole blood (27/60) and 100% samples of tissues (27/27).

Positive results to ELISA in 42% serum samples (24/60 serums).

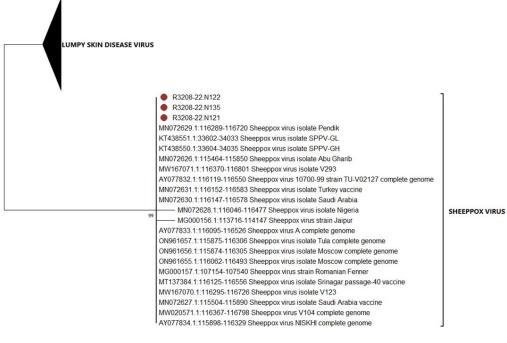
TYPE OF SAMPLE	METHOD	Nº ANALYSED	POSITIVE RESULT	NEGATIVE RESULT	INCONCLUSIVE RESULT
SERUM	drELISA	60	24	36	0
BLOOD EDTA	qPCR (Bowden 2008)	60	13	33	14
SKIN LESION	qPCR (Bowden 2008)	27	27	0	0



Outbreak 2022/1: Laboratory analysis and results

Phylogenetic analysis was conducted using MEGA X program. The evolutionary analysis was inferred by using the Maximum Likelihood method based on the General Time Reversible model with Gamma distributed and 1000 bootstrap replications. There were a total of 387 positions in the final dataset.





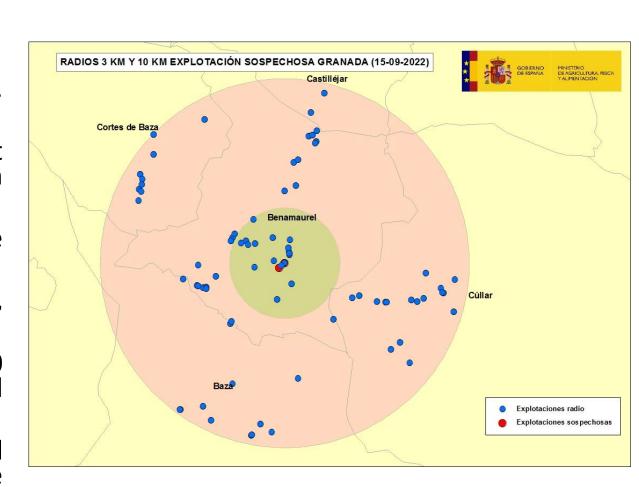
- 16/09/2022: identification by specific PCR of sheep pox virus strain. On 19/09/22, sequencing analysis determines it is a field strain (not vaccine strain).
- 19/09/2022: notification of the outbreak by CA of Andalucía via RASVE (national database) to central level and from central level to ADIS (EU) and WAHIS (WOAH).
- Samples are sent to EURL (Sciensano) for sequencing.



Outbreak 2022/ 1: Control measures on the affected farm

Commission Delegated Regulation (EU) 2020/687:

- In-site culling of the total census of the farm. Finished on the 20th September.
- Safe disposal of carcasses in the closest authorized ABP- plant under canalization procedure.
- Withdrawal of risk products (bedding, manure and feed).
- Official preliminary cleaning and disinfection, to be finished on September 23^{rd.}
- Adoption of Restricted Zone (RZ): PZ (3km; 20 farms) and SZ (10km; 61 farms). Total susceptible population: 13.161 animals.
- Official investigation of 65 farms located outside the RZ but considered of risk due to the existence of risk movements to the close-by lamb assembly center.





Results of epi investigation by OVS of Andalucía in relation to outbreak 2022/1

(up to 26/09/2022)

PROTECTION ZONE (3km)

- All 20 farms visited (100%)
- 18 with favourable results, no clinical findings.
- 2 farms with detection of skin lesions, both of them already confirmed as negative by NRL.

SURVEILLANCE ZONE (10km)

- All 61 farms visited (100%).
- 60 with favourable results, no clinical findings.
- 1 with detection of skin lesions in one only sheep, confirmed positive by PCR in the NRL, it is the
 outbreak 2022/2 (next slide)

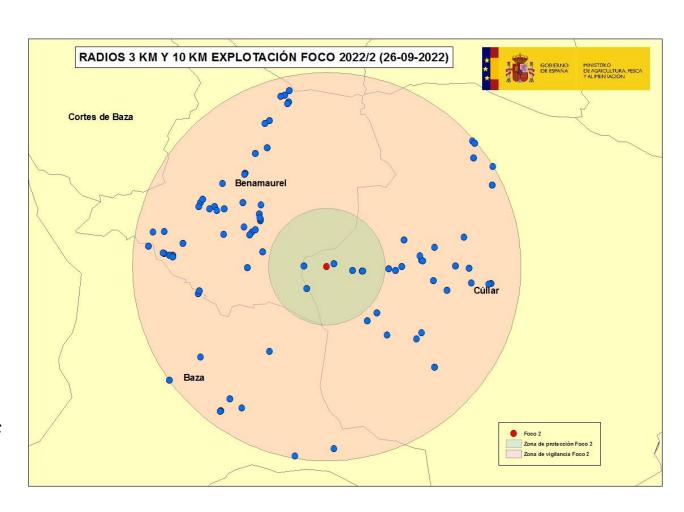
OUTSIDE THE RESTRICTED ZONE

. Immobilization of related farms until infection is ruled out. (65 farms)



Outbreak 2022/2: Cúllar, Granada

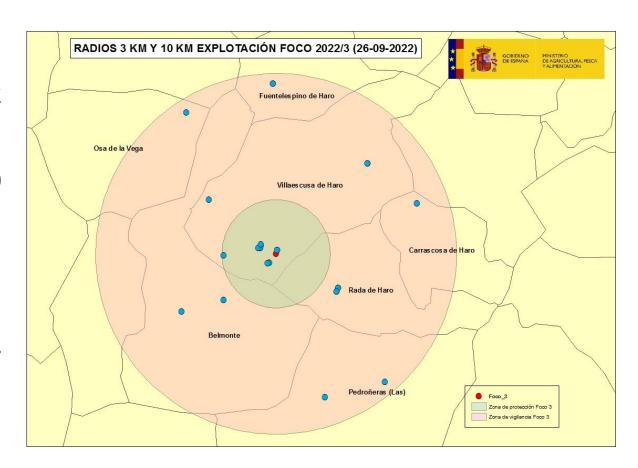
- During epidemiological investigation within the RZ of outbreak 2022/1, compatible lesions are detected in one only animal in a Sheep holding within the 10 km SZ on 23rd September.
- Breeding holding for production of meat, with 170 sheep and 20 goats.
- Official samples sent to NRL Algete, tested positive the same day, the 23rd in the evening.
- Adoption of the **same control measures** as for outbreak 2022/1.
- C&D operations to be finished on 28th September.
- Zoning: 6 farms in PZ and 79 in SZ, many of them already visited as they were included in the RZ of outbreak 2022/1





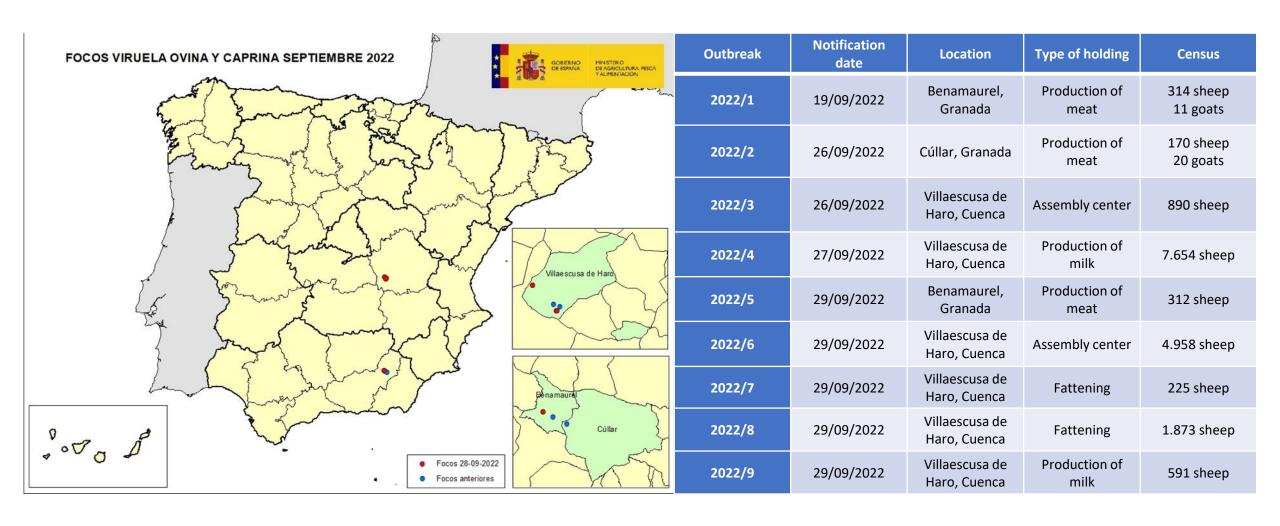
Outbreak 2022/3: Villaescusa de Haro, Cuenca

- On 23/09/2022, during epidemiological investigation due to movements from the assembly centre 200m away from outbreak 2022/1, compatible lesions and symptoms are detected in **only one sheep.**
- It is an assembly centre with a census of 890 sheep in the municipality of Villaescusa de Haro, in Cuenca province, Castilla La Mancha.
- Official samples sent immediately to LCV Algete resulting positive on the same day, 23rd in the evening.
- Adoption of the **same control measures** as for outbreak 2022/1 & 2.
- C&D operations to be finished on 7th October.
- Zoning: 8 farms in PZ and 11 in SZ. Total susceptible population: 42.620 animals.





Summary of other outbreaks notified to date





Comparison of Restricted Zones in Granada and Cuenca

• In the case of the **outbreaks of Granada Province** the RZ includes **more holdings and smaller in size**, with a **total susceptible population of 13.161 animals**. Most of these holdings are breeding holdings for **production of meat**.

• In the case of the **outbreaks of Cuenca Province** the RZ includes **less holdings** and larger in size, with a total susceptible population much higher 42.620 animals, being many of them breeding holdings for production of milk.



Measures implemented in the Restricted Zone

Delegated Regulation (EU) 202/687 of the Commission:

- Census of all farms and susceptible animals (species, categories, number of animals/establishment).
- Restriction and control of animal and risk products movements, including reproductive materials and ABP.
- Prohibition of fairs, markets, exhibitions and other concentrations of livestock.
- Enhanced biosecurity and passive surveillance.



Conclusions

- 9 PCR confirmed outbreaks so far in 2 zones epidemiologically linked for animal movement.
- In the restricted area of Cuenca, 4 out of 6 outbreaks are actually 1 epidemiological unit. It belongs to the same owner and they share a veterinarian, workers, machinery
- Samples sent to the EURL (Sciensano, Belgium) for phylogenetic analysis to try to obtain clue of the origin of the strain circulating in Spain.
- OVS of Andalucía and C. La Mancha are making a great effort visiting all holdings located within and outside the RZs (all affected, suspect and risk-contact farms; >180 holdings so far).
- Origin of the virus remains unknown at the moment, investigations keep ongoing.
- No risk movement from the restricted areas to another member state.
- Movement restrictions in the RZ: very serious problem for holdings located within the RZ due to impossibility to store daily fresh milk from healthy animals → EC doing its best to solve the problem as soon as possible.





THANK YOU VERY MUCH FOR YOUR ATTENTION