

Department for Environment, Food and Rural Affairs

## Updated Outbreak Assessment #6

# Epizootic Haemorrhagic Disease in Europe

14 August 2024

### Disease report

Our [last report](#) in November 2023 highlighted the rapid spread of Epizootic Haemorrhagic Disease Virus Serotype 8 (EHDV-8) through western France in autumn 2023. The number of reports dropped over the winter due to the unsuitable environmental conditions for transmission.

Since the beginning of summer 2024, there have been confirmed reports of EHDV-8 resurfacing in Spain, France and Portugal ([Plateforme ESA 2024](#)). EHDV-8 was also detected in Andorra for the first time. France detected the first outbreaks of EHDV-8 for 2024 in June, although the exact start date is unclear.

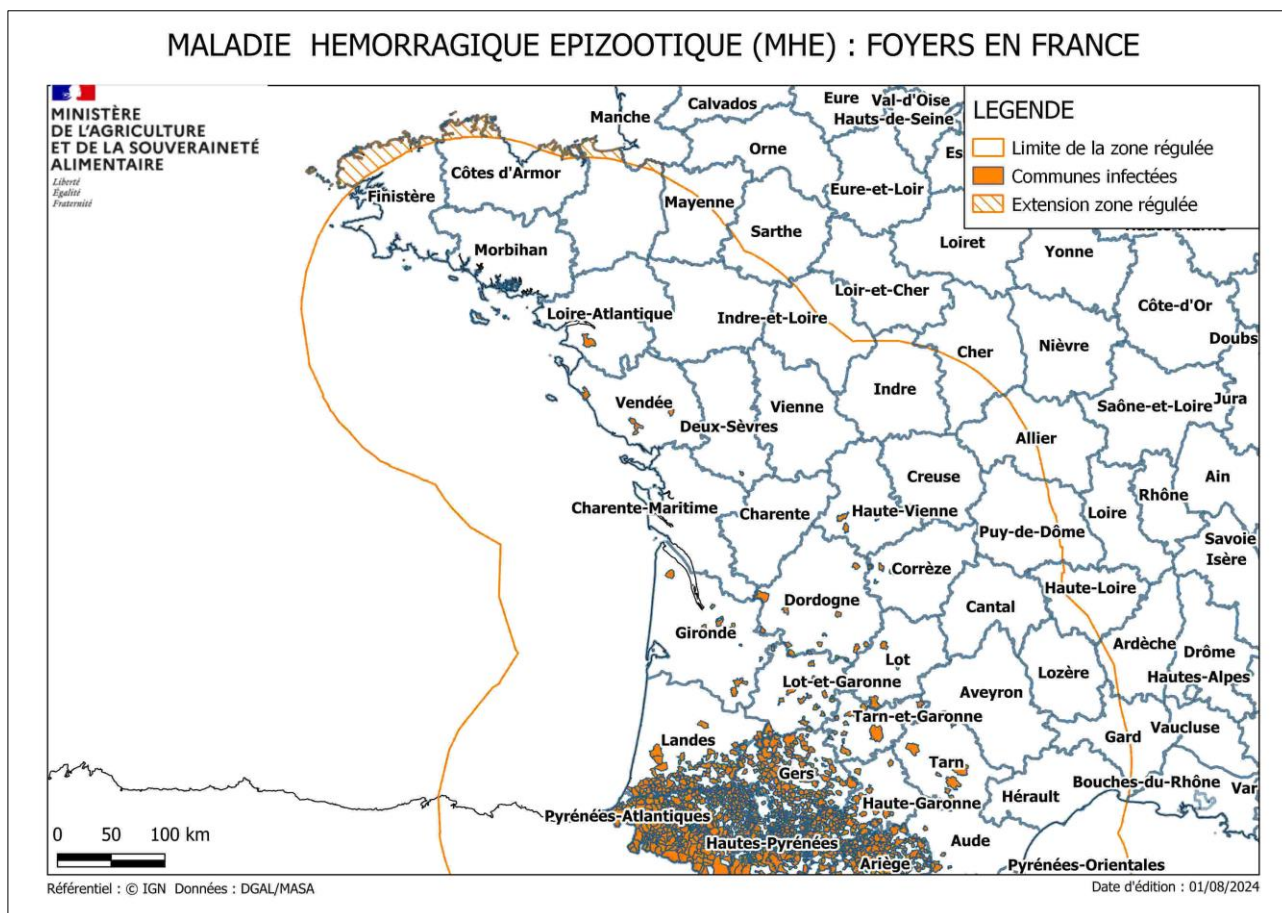
As of the 8 August France has reported over 120 outbreaks of EHDV-8, including 63 clinical cases in cattle, since the beginning of the new season (1 June 2024) ([Plateforme ESA 2024](#)). These reported outbreaks are primarily located in the south of France near Spain in departments that were previously affected in 2023 ([Plateforme ESA 2024](#)).

On the 3 June, Spain reported the first detection of EHDV-8 for 2024 ([Spanish Ministry of Agriculture June 2024](#)). As of 14 August, there have been 19 additional outbreaks on cattle farms Catalonia, Castile and Leon, and Galicia, bringing the total to 20 reports at the time of writing ([ADIS 2024](#)).

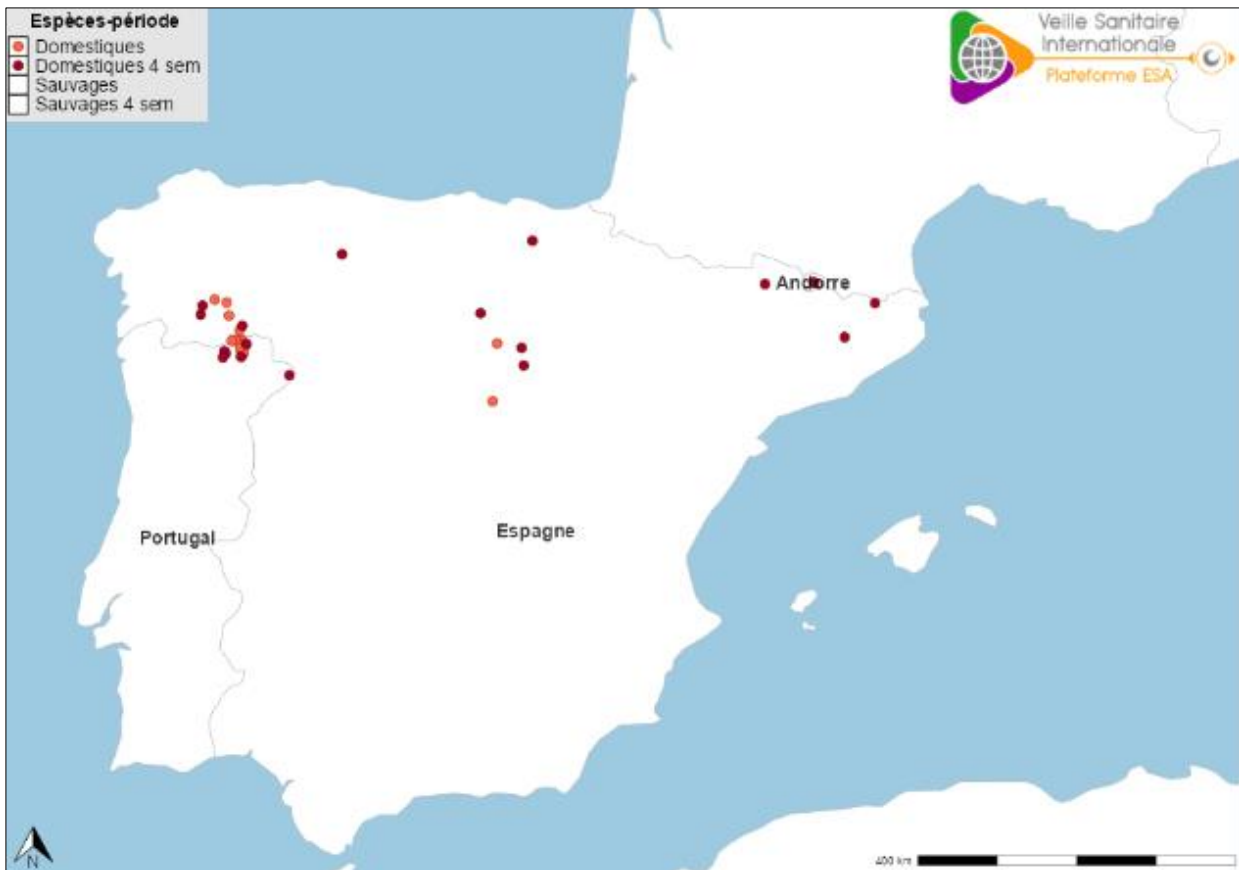
On the 13 July, Portugal reported the first detection of EHDV-8 for 2024. As of 14 August there have been 22 outbreaks all located in the north ([ADIS 2024](#)).

There have been no detections of EHDV-8 reported in Italy so far this season.

Figure 1: Map showing municipalities in France.



The solid orange areas show where EHDV-8 was reported in France, primarily in municipalities in the southwest near the border with Spain. The orange line shows the 150km restriction zone around the outbreaks, as reported by the French Ministry of Agriculture and Food Sovereignty from the 21 September 2023 to August 2024 (Source: [The Bluetongue \(BTF\) situation in France | Ministry of Agriculture and Food Sovereignty](#) accessed 13 August 2024).



**Figure 2:** Map showing EHDV-8 outbreaks in Portugal, Spain and Andorra since 1 June 2024, including reports in the last 4 weeks in red and all other outbreaks since the beginning of June in orange. The majority of outbreaks have occurred along the Portuguese and Spanish border near Galicia. Cases were also reported near the Pyrenees and the first ever detection of EHDV-8 in Andorra. (Source: [Weekly international health watch bulletins for 06/08/2024 \(plateforme-esa.fr\)](https://www.plateforme-esa.fr/weekly-international-health-watch-bulletins-for-06/08/2024), accessed 13 August 2024).

## Situation assessment

### France

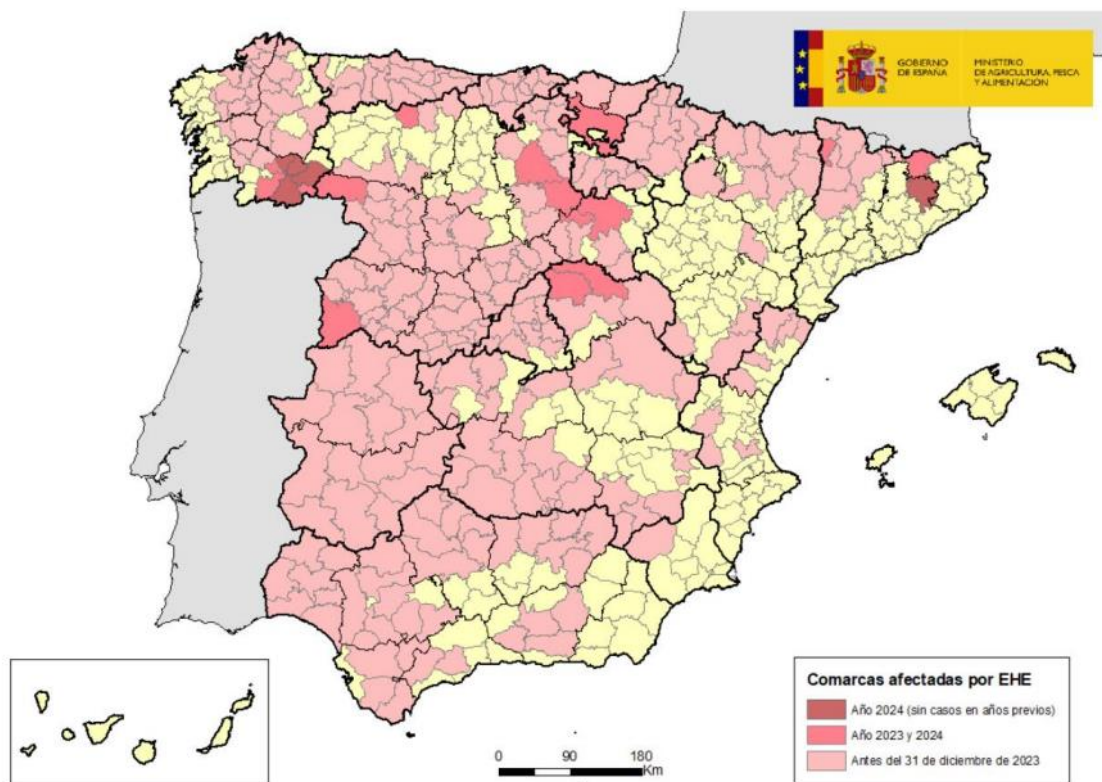
In 2023, the first report of EHDV-8 in France was on the 21 September ([Plateforme Sept 2023](#)). By the end of the year there were over 4,000 reports of EHDV-8 across 20 departments primarily located in the south but extending up the west coast to Brittany. France detected the first outbreaks of EHDV-8 for 2024 in June ([Plateforme ESA 2024](#)).

As of the 8 August France reported over 120 outbreaks of EHDV-8, including 63 clinical cases in cattle this season (since 1 June). These have primarily been detected in the bordering regions of the Pyrenees near Spain. At this point there are no reports of new cases of EHDV-8 in the North of France. To control the spread of EHDV-8, French authorities have prohibited the export of live cattle from all affected regions ([Plateforme ESA 2024](#)).

## Spain

In 2023, all regions of mainland Spain were affected by EHDV-8. On the 3 June 2024 Spain confirmed that EHDV-8 successfully overwintered and a new report was published ([Spanish Ministry of Agriculture June 2024](#)). To control the spread of EHDV-8, Spanish authorities have prohibited the export of live cattle from all affected regions. ([Spanish Ministry of Agriculture August 2024](#)). As of 14 August, there have been 20 confirmed cases of EHDV-8 in Spain across the northern half of the country in the regions of Galicia, Castile Leon, La Rioja, Navarre, Aragon and Catalonia. ([ADIS 2024](#)).

Compared to August in previous year, there are fewer reports of EHDV-8 so far this year. There were approximately 60 reports of EHDV as of 22 August 2023 in Spain. These reports were in the provinces of Andalucía, Extremadura, Castilla – La Mancha, Mercia, Madrid, and Castile – Leon ([Spanish Ministry of Agriculture August 2023](#)).



Map 1: Update of counties affected by EHE

**Figure 3:** Map showing the areas that were affected with EHDV-8 in 2023, as well as the areas where EHDV-8 has overwintered and been detected in 2024. All reports in 2024 so far have been in the northern half of Spain, including a high concentration in Galicia and near the Pyrenees. (Source: [Documento \(mapa.gob.es\)](#), accessed 13 August 2024).





**Figure 4:** Map showing the areas affected with EHDV-8 as of 22 August 2023. This includes the provinces of Andalucía, Extremadura, Castilla – La Mancha, Murcia, Madrid, and Castile – Leon. Reports are primarily in the southwest of the country. (Source: [Microsoft Word - Nota EHE\\_22\\_08\\_2023.docx \(mapa.gob.es\)](#) accessed 13 August 2024).

### Portugal

In 2023, the first detection of EHDV-8 was on 13 July 2023. By 22 August 2023 there were only 2 reports located on the border of Spain in Beja ([Plateforme August 2023](#)). By the end of the year in Portugal there were around 73 reports of EHDV located in the eastern provinces of Faro, Beja, Evora, Portalegre, Castelo Branco, Guarda, Braganca, Vila Real along the border of Spain ([APHA 2023](#)). On the 13 July 2024, Portugal reported the first detection of EHDV-8 for 2024. As of 14 August 2024, there have already been 22 reports this season all in the north, bordering Spain ([ADIS 2024](#)).

### Andorra

On 24 July 2024, EHDV-8 was reported in Andorra for the first time. At the time of writing, there has only been one report of the disease in cattle. The presence of EHDV-8 in Andorra signifies that EHDV is migrating and active across the Pyrenees region ([Plateforme ESA 2024](#)).

## Conclusion

Our previous report highlighted that in 2023, the eastern half of Portugal (Faro, Beja, Evora, Portalegre, Castelo Branco, Guarda, Braganca, Vila Real), all provinces of mainland Spain and the Western half of France (Occitania, Nouvelle-Aquitaine, Pays de la Loire and Brittany) was affected with EHDV-8. Between June and August 2024, detections of EHDV-8 were identified confirming that it had successfully overwintered in Spain, France and Portugal.

So far there have been no detections of EHDV-8 in Italy this season. There has also been the first detection of EHDV-8 in Andorra ([ADIS 2024](#), [Plateforme ESA 2024](#)). This is not unexpected due to the proximity of Andorra to recent reports in France and Spain.

At this time there have been no extensions of restriction zones in these countries as all reports are in areas that were previously affected ([Plateforme ESA 2024](#), [Spanish Ministry of Agriculture 2024](#)). It appears that France and Portugal have had more reports of EHDV-8 so far this season when compared to 2023. Last year France reported the first detection of EHDV-8 on the 21 September whereas this year there are already over 120 reports. In both 2023 and 2024, Portugal reported the first detections of EHDV-8 on the 13 July. But this season there are already 20 reports of EHDV-8 compared to 2 in August 2023. On the other hand, Spain has had less reports of EHDV-8 to date this season (20 reports as of 14 August 2024 compared to 60 as of 22 August 2023). Despite this it is difficult to speculate what impact these differences will have as we move towards late summer and the beginning of autumn.

The increase in detections since June is likely a consequence of the warmer temperatures making transmission more suitable. Evidence suggests that EHDV requires a minimum average temperature of 19.5°C for replication and for the extrinsic incubation period (EIP) of the virus to complete and above this threshold the rate of spread increases exponentially (Wittmann et al., 2002). Furthermore, the number of reports is likely to increase as we head towards the Culicoides population peaks in mid to late summer, and during early autumn the conditions are optimal for EHDV transmission by infected Culicoides ([Plateforme 2023](#)) (Wittman et al., 2002).

In 2023, towards the end of September EHDV-8 was first detected in Pyrénées-Atlantiques. Within 2 months, there were over 3,000 outbreaks and the disease had spread northwest in France up to Brittany near the English Channel ([APHA 2023](#)). This highlights the possibility of rapid spread. If conditions are suitable, it is plausible that this could occur again. Currently, there are no reports of disease in the north of France in the new season ([Plateforme ESA 2024](#)). If EHDV-8 can successfully reach the north of France in 2024 there is potential for windborne incursion of infectious Culicoides carrying EHDV-8, if meteorological conditions are suitable. Onward transmission of EHDV-8 is temperature dependant and, dependant on the time of incursion, the conditions in Great Britain may not be suitable as the temperature here is milder.

The Airborne Orbivirus Assessment assesses this risk each week using the Numerical Atmospheric-dispersion Modelling Environment (NAME) model and publishes [weekly risk](#)

[assessment reports](#). This is a collaborative report between APHA, The Pirbright Institute and Met Office regarding windborne incursions of midges from affected areas. It should be noted that if meteorological conditions become optimal, and EHDV-8 spreads north, the risk of windborne incursion will likely increase. As meteorological conditions are so variable, the risk of airborne incursion of infected midges is changeable and risk levels may fluctuate between weeks. All risk levels, rationales and nuance are captured in the weekly risk assessment reports.

All imports of susceptible livestock from EHDV-8 affected counties are required to comply with the health certificate requirements. There is currently no fully approved vaccine for EHDV-8, making it difficult to comply. All livestock require isolation, serology testing and must be 150km away from any outbreaks. France is unable to send livestock or germinal products due to the presence of BTV-3. There have been no imports of livestock from either Spain or Portugal since 1 June 2024. There have been 4 consignments of germplasm from Spain and 1 from Portugal since June, but as per the health certificate requirements, the donor animals are required to test negative for approval.

The overall risk of incursion of EHDV-8 into Great Britain is maintained at **very low** (event is very rare but cannot be excluded).

## Authors

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