



## Joint FAO/WHO/WOAH Rapid Risk Assessment of Rift Valley fever (RVF) in Senegal and Mauritania: Implications for Public Health and Animal Health

Date and version of current assessment: 08 October 2025, v1

Date(s) and version(s) of previous assessment(s): NA

### Overall risk for human health and confidence

| Overall risk for human health Senegal and Mauritania |          |        |
|------------------------------------------------------|----------|--------|
| National                                             | Regional | Global |
| High                                                 | Moderate | Low    |

| Confidence in available information |          |          |
|-------------------------------------|----------|----------|
| National                            | Regional | Global   |
| Moderate                            | Moderate | Moderate |

### Overall risk for animal health and confidence (based on information available at time of assessment)

| Overall risk for animal health Senegal and Mauritania |           |        |
|-------------------------------------------------------|-----------|--------|
| National                                              | Regional* | Global |
| High                                                  | Moderate  | Low    |

| Confidence in available information |          |          |
|-------------------------------------|----------|----------|
| National                            | Regional | Global   |
| Moderate                            | Low      | Moderate |

\*Regional risk moderate except High in parts of Mali

### Risk statement

This risk assessment is based on the current epidemiological and epizootic situation of Rift Valley fever (RVF) in Senegal and Mauritania, **from 20 September through 8 October 2025**. The risk assessment was conducted separately for each country. However, the findings indicate that the level of risk is the same for both countries across all levels, for both human and animal health.

During this period, **Senegal** reported 119 confirmed human RVF cases, including 16 deaths, resulting in a case fatality rate (CFR) of 13.4%. Cases were recorded across eight health districts in three regions of Senegal, with the majority in Saint-Louis Region with 110 cases (92%) followed by Louga (four cases) and Matam (one case). The affected districts in Saint-Louis Region: Podor, Richard-Toll, Dagana, and Saint-Louis are located along the northern border with Mauritania along the Senegal River.

The most affected age groups were 15- 35 years, accounting for 69 cases (58%), and 35-60 years with 34 cases (29%), with 77 % of cases occurring in males. Hemorrhagic symptoms were reported in 22 cases (18%) of which 13 resulted in death.

Animal infections resulting in abortions and livestock mortality were also reported. On 23 September, 1122 blood samples and four abortion samples were collected from small ruminant herds in villages where human cases were reported. Of these, 36 samples tested positive across six herds. By 30 September, a total of 27 confirmed animal cases, two deaths have been reported to the World Organisation for Animal Health (WOAH) through the World Animal Health Information System (WAHIS). As of that date, five animal outbreaks have been confirmed in Saint-Louis Region, with four additional outbreaks expected to be included in a forthcoming follow-up report currently in draft.

RVF is endemic in Senegal, with previous outbreaks affecting both humans and animals. The last confirmed human case before this outbreak occurred in January 2025 in Touba, located in the Diourbel region, while the last recorded human case in Saint-Louis region occurred in 2022.

Between 27 September and 5 October 2025, **Mauritania** reported 17 confirmed human RVF cases, including eight deaths, resulting in a CFR of 47%. Cases were recorded across seven districts in five regions (wilayas), three of which have international borders: Assaba which borders Mali to the south, Brakna and Trarza both bordering Senegal along the Senegal River. Of 66 samples tested, the positivity rate was 25.7%.



Multiple active outbreaks in animals have also been reported. According to the Ministry of Animal Resources of Mauritania, as of 6 October, 17 outbreaks across eight regions, with 86 out of 307 samples testing positive. The first animal cases, involving goats and camels, were reported in August 2025. A total of 39 clinical animal cases (including 16 deaths in two dromedaries and 14 goats) were reported in Aioun, Hodh-Gharbi region and Timbedra, Hodh-Charghi region, both are located in southeastern Mauritania near the Mali border, and in Maghta Lahjar, Brakna region, in central Mauritania. In Brakna region alone, 233 animal cases and 55 deaths have been reported to WOAH by 3 October 2025. Affected animals include sheep, goats, camels and cattle.

RVF is endemic in **Mauritania**. The last major outbreak occurred in 2022, with 47 confirmed human cases, including 23 deaths (CFR 49%), mostly among animal breeders in nine of 15 regions. The virus also affected animals such as cattle, camels, and small ruminants, with sample positivity rates of around 24% tested during that outbreak period.

The current outbreak in Senegal and Mauritania is unusual in both its magnitude and severity. It involves multiple districts in border regions, particularly along the Senegal River, increasing the risk of cross-border transmission between Senegal and Mauritania. In Mauritania, the outbreak also extends to eastern regions bordering Mali, raising concerns about potential regional spread beyond the Senegal River basin.

A notably high proportion of severe and haemorrhagic cases has been reported. In Senegal, 18% of confirmed human cases presented with haemorrhagic symptoms, with 13 cases resulting in death. The situation is particularly concerning in Mauritania, where the CFR has reached 47%, reflecting both the severity of illness and potential gaps in early detection and clinical management. Further information is needed to better understand the factors contributing to this high fatality rate. Possible contributing factors include delayed access to adequate care, shortage of essential medical products and supplies and underreporting of mild cases, which may result in disproportionate detection of severe cases. However, additional factors should also be investigated.

### **Risk to Human Health – Senegal and Mauritania**

**The risk to human health at the National level of Mauritania and Senegal is assessed as ‘High’** due to the following reasons:

- Endemic circulation of RVF virus in both countries, with recurrent outbreaks affecting humans and livestock.
- Favourable environments for mosquito vectors exist, including rivers, wetlands, and extensive hydrographic networks. Heavy rainfall and flooding contribute to mosquito proliferation and increased transmission risk.
- Regular livestock movements and transhumance across regions and borders, facilitate the spread of the virus to previously unaffected animal populations and human communities.
- High animal density and poor sanitation in some areas contribute to vector breeding and virus amplification.
- Frequent human-animal contact, especially among high-risk groups such as herders, farmers, slaughterhouse workers, and veterinarians, increases infection risk.
- Preventive RVF animal vaccination coverage is limited or absent, increasing susceptibility in livestock.
- Surveillance and diagnostic capacity in human and animal health sectors, although improved, remain limited, especially at decentralized levels, causing delayed detection, underreporting, and reliance on central PCR confirmation.
- Regional cross-border trade and population and livestock mobility along the Mauritania–Senegal border are ongoing, increasing the risk of regional spread.
- Presence of specific RVF viral lineages, including lineage H, exhibiting variable virulence which might impact outbreak severity.
- Limited risk communication, and insufficient engagement with affected populations, including pastoralists, herders, livestock owners, butchers and veterinarians, as well as nomadic and semi-nomadic communities. Lack of trusted intermediaries (e.g. local associations, civil society groups) to support awareness-raising and risk prevention.



- Lack of community data to understand community vulnerabilities, knowledge gaps, access to trusted information, local concerns, behaviours and barriers impeding protective action.
- Insufficient knowledge and lack of targeted training for healthcare workers and community health workers on RVF recognition, prevention, and management, as well as for community-based animal health workers on zoonotic risk, vector control, and engagement best practices.
- Despite One Health frameworks being activated, coordination between human health, animal health, and local authorities is not consistent, which undermines preparedness and response efforts.
- Insufficient logistics and supplies, including shortages of personal protective equipment (PPE), sampling kits, and transport capabilities, continue to limit outbreak response capacity.
- Potential socio-economic impact on communities relying on livestock, with limited social protection measures or public health incentives to mitigate livelihood losses.
- The impact of ongoing floods is hindering operations and healthcare access.
- Concurrent outbreaks of diphtheria, measles, mpox, and other diseases are placing additional strain on an already overstretched health system.

**The risk of this event to human health at the Regional level is considered 'Moderate' due to:**

- Formal and informal cross-border livestock movements, mainly from Mauritania and to a lesser extent from Senegal.
- Insufficient cross-border alert mechanisms, collaboration, and coordination in community surveillance, detection, and reporting of suspected animal and human cases.
- Limited capacities and resources in veterinary service, hindering effective disease control and response in animal health sector.

**The risk of this event to human health at the Global level is considered 'Low'**

- The current RVF outbreak in Mauritania and Senegal poses a low risk at the global level, given no human to human transmission of RVF virus has ever been documented to date and there is presence of strict regulations on meat and livestock imports to other countries/regions.

**Risk to Animal Health – Senegal and Mauritania**

**The risk to animal health at the National level of both Mauritania and Senegal is assessed as 'High', due to the following reasons:**

- Endemic circulation of RVF virus in both countries, with recurrent outbreaks affecting livestock and humans, indicating sustained local transmission cycles and virus maintenance.
- Environmental factors in affected regions, including extensive hydrographic networks, rivers, wetlands, and combined with heavy rainfall and flooding, create suitable conditions for mosquito vector proliferation.
- Recent heavy rainfall and floods may facilitate the hatching of dormant mosquito eggs, that carry RVF virus, especially in areas with previous RVF activity, increasing the risk of new outbreaks.
- Open-air husbandry practices further increase exposure to vectors.
- Regular livestock movements and transhumance across regions, facilitate the spread of the virus within and between countries.
- Regional cross-border trade and traditional/tribal migrations (e.g. among Fulani pastoralists) may contribute to regional transmission.
- Lack/suspension of routine sentinel surveillance in domestic flocks and absence of cross-border surveillance mechanisms.
- Limited animal vaccination coverage in high-risk areas of both countries.
- Underreporting of suspected animal cases at the community level due to limited awareness or access.



- Gaps in risk communication and community engagement with at-risk populations.
- Insufficient multisectoral coordination, including challenges in harmonizing efforts between human health, animal health, and local authorities despite One Health frameworks being activated.
- Weak cross-border coordination for surveillance and outbreak response.
- Shortages of PPE, sampling kits, transport and laboratory diagnostic supplies are limiting outbreak response capacity.
- Communities dependent on livestock face significant socio-economic impact, with the absence of a social protection mechanism.
- National systems have limited capacity to respond effectively to sudden changes in RVF risk following heavy rainfall and/or flood.

**The risk of this event to animal health at the Regional level is considered 'Moderate' due to the following reasons:**

- Although favourable environmental conditions in affected areas, such as extensive hydrographic networks, wetlands, and recent heavy rainfall and flooding, are conducive to mosquito vector proliferation, these conditions are not uniformly present across the broader region.
- Recent heavy rainfall and floods may facilitate hatching of RVF-infected mosquito eggs in areas where RVF has been reported in the past.
- The rice fields along the Senegal River (a high-risk zone) are now approaching harvest season (October–December). As water use declines, drier environmental conditions may emerge, becoming less favourable for sustained vector propagation compared to earlier months.
- Livestock transhumance, cross-border trade, and tribal movements (e.g. among Fulani pastoralists) continue to pose a potential risk for regional spread, however these movements are seasonal.
- Preventive RVF vaccination remains limited or absent across much of the region, hence there are increased numbers of susceptible livestock populations. However, peri-focal vaccination has begun in some localized zones in Senegal.
- There are gaps in animal disease reporting, particularly at the community level, due to limited awareness, poor access, or lack of incentives.
- While One Health coordination mechanisms have been activated nationally, cross-border coordination for animal health surveillance and response remains limited, with logistical constraints including shortages of PPE, sampling kits, transport, and diagnostic supplies.
- Communities across the region are highly dependent on livestock for livelihoods, and new outbreaks could result in substantial economic losses.

**The risk of this event to animal health at the Global level is considered 'Low' due to the following reasons:**

- Strict import regulations are applied for animals and animal products originating from currently affected countries.
- Live animal trade from the Sahel is limited or largely restricted, except for exports to North African countries.



## Risk questions Senegal and Mauritania, WHO assessment

| Risk question Human Health       |          | Assessment    |              | Risk     | Rationale                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------|----------|---------------|--------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                  |          | Likelihood    | Consequences |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Potential risk for human health? | National | Likely        | Major        | High     | <p>RVF is endemic in <b>Senegal</b>. While most RVF infections are subclinical or mild, CFR is high among patients who develop a severe form of the disease. The current outbreak in Senegal is unusual in both magnitude and severity. Between 20 September through 8 October 2025, Senegal reported 119 confirmed human RVF cases, including 16 deaths, resulting in a CFR of 13.4%.</p> <p>Cases have been reported across eight districts (Dagana, Keur-Momar-Sarr, Linguere, Pete, Podor, Richard-Toll, Saint-Louis, and Thilogne) in three regions.</p> <p>Notably, as of 6 October, cases had been reported in five districts. Within two days, this number increased to seven, indicating a rapid geographic expansion of the outbreak.</p> <p>Given these factors, the risk to human health at the National level is assessed as <b>High</b>.</p> |
|                                  | Regional | Likely        | Moderate     | Moderate | <p>RVF is endemic in <b>Mauritania</b>. While most infections are subclinical or mild, the CFR is high among patients who develop severe disease. From 27 September to 5 October, 17 confirmed human RVF cases, including eight deaths (CFR: 47%), have been reported across five regions (wilayas) and seven districts.</p> <p>Case management capacities are limited, particularly for severe cases.</p> <p>Communication and community engagement efforts are hampered by rumours, low awareness, and limited involvement of community leaders, therefore limiting timely health seeking behaviours.</p> <p>For these reasons the risk at the National level for human health is considered <b>High</b>.</p>                                                                                                                                            |
|                                  | Global   | Very unlikely | Minimal      | Low      | <p>The risk at the Regional level for human health is considered <b>Moderate</b>. At the Global level this event poses a <b>Low</b> risk, due to the absence of documented human-to-human transmission of RVF virus and the restricted international movement of livestock and animal products.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |



|                          |          |               |          |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------|----------|---------------|----------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Risk of event spreading? | National | Likely        | Moderate | High     | <p>The risk of event spreading at National level in <b>Senegal</b> is <b>High</b> due to a rapid geographic expansion of the outbreak.</p> <p>The risk of the event spreading at the National level in <b>Mauritania</b> is assessed as <b>High</b>. Despite Mauritania's previous experience with RVF outbreaks, public health hygiene measures, particularly meat inspection for animals slaughtered and consumed at home, are poorly enforced in most pastoral communities. This significantly increases the risk of transmission to humans. The lack of access to efficient veterinary services complicates control mechanisms like preventive routine livestock vaccinations that would prevent the amplification in animals and consequently the potential transmission to humans. Surveillance capacities are insufficient, leading to delays in case detection, which may also delay access to health care. The movement of livestock, whether for trade, grazing, or migration, can significantly contribute to the spread of RVF.</p> |
|                          | Regional | Likely        | Minor    | Moderate | <p>There is cross-border movement by populations in the affected countries, and the risk of the event spreading in neighbouring countries, is <b>Moderate</b> due to many challenges to applying effective preventive and control measures, including weak infrastructure of health facilities, lack of capacity and support systems for field logistics and communication, weak surveillance systems, and insufficient information on the epidemiological and reservoir status of the RVF virus. However, RVF is a viral zoonosis, and to date, no human-to-human transmission of the RVF virus has been documented. Therefore, the risk of global spread is <b>Low</b>.</p>                                                                                                                                                                                                                                                                                                                                                                   |
|                          | Global   | Very unlikely | Minimal  | Low      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |





|                                                                   |          |               |          |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------------------------------|----------|---------------|----------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Risk of insufficient control capacities with available resources? | National | Likely        | Moderate | Moderate | <p>Current floods in <b>Senegal</b> may impact operational response and reduce healthcare capacity, with additional strain on the health system already managing multiple concurrent disease outbreaks. Multisectoral coordination challenges persist, particularly in aligning efforts between human health, animal health, and local authorities, despite existing frameworks.</p> <p>Logistics and supply limitations include shortages of PPE, sampling kits, transport capabilities, and laboratory diagnostic reagents.</p> <p>In <b>Mauritania</b>, multisectoral coordination is incomplete, with ongoing challenges in harmonizing actions across human health, animal health, and local authorities despite activation of One Health mechanisms. Surveillance and diagnostic capacity remain limited, leading to delayed detection, underreporting, and reliance on National Institute for Public Health Research (INRSP, as per acronyms in French) for PCR confirmation. Logistics and supply chains are inadequate, including shortages of PPE, sampling kits, and transport difficulties.</p> <p>Case management and isolation capacity is limited, particularly for severe cases, Community engagement efforts are hindered by rumors, low public awareness, and limited involvement of community leaders.</p> <p>Financial and material resources are insufficient, with constrained emergency budgets, slow fund mobilization, and deployment delays affecting response operations.</p> |
|                                                                   | Regional | Unlikely      | Minor    | Low      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                                                                   | Global   | Very unlikely | Minimal  | Low      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

### Risk questions Senegal and Mauritania, FAO and WOA assessment

| Risk question Animal Health       |          | Assessment    |              | Risk | Rationale                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------------|----------|---------------|--------------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                   |          | Likelihood    | Consequences |      |                                                                                                                                                                                                                                                                                                                                                                                     |
| Potential risk for animal health? | National | Highly likely | Major        | High | <p>Several livestock samples in Senegal and Mauritania have already been confirmed positive, but due to shortages of laboratory supplies, including reagents and overall lack of funding, these cases likely represent only a fraction of true extent of animal infection</p> <p>In <b>Senegal</b>, Sentinels' surveillance systems, which were previously used to monitor RVF,</p> |



|                                                                   |          |               |       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------|----------|---------------|-------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                   | Regional | Likely        | Major | Moderate | <p>have been suspended due to a lack of funding further limiting early detection capacity.</p> <p>Although RVF is endemic in Senegal, the current outbreak is becoming larger than in recent years, both in terms of the number of confirmed human cases (who often act as sentinel indicator) and the geographic spread of the virus.</p> <p>Although RVF is endemic in <b>Mauritania</b>, the current outbreak appears larger than in recent years, in terms of the number of confirmed human cases (often serve as sentinel indicator) and the geographic distribution.</p> |
|                                                                   | Global   | Unlikely      | Major | Low      | <p>As for the region, the risk in areas of Mali bordering Senegal and Mauritania, which share the same eco-zone should be considered <b>High</b> due to the potential for cross-border spread, however the risk at Regional level is <b>Moderate</b>.</p>                                                                                                                                                                                                                                                                                                                      |
| Risk of event spreading?                                          | National | Highly likely | Major | High     | <p>Although RVF is endemic in some countries in the region, RVF epidemics do not occur every year.</p> <p>The current outbreak across two countries is already larger than those in recent years. Given the shortage of funding for field activities and supplies, including reagents, the confirmed cases most likely represent only the tip of the iceberg, suggesting that wider transmission may be occurring undetected.</p>                                                                                                                                              |
|                                                                   | Regional | Likely        | Major | Moderate | <p>While an RVF vaccine for animals exists, the immediate supply of doses is limited and likely insufficient to cover the large number of susceptible animals in areas at risk. Additionally, financial constraints, both at the governments and livestock owner level, may hinder the purchase of sufficient vaccines to achieve herd immunity.</p>                                                                                                                                                                                                                           |
|                                                                   | Global   | Unlikely      | Major | Low      | <p>Pastoralist movements are essential for herds/flocks' survival but also contribute to RVF spread, particularly in the absence of coordinated animal health measures. In some areas, traditional cultural practices may further facilitate the spread of RVF. The displacement of farmers and their livestock from the flood-affected areas increases the risk of introducing the virus into new locations, potentially amplifying the outbreak.</p>                                                                                                                         |
| Risk of insufficient control capacities with available resources? | National | Highly likely | Major | High     | <p>At the Global level, control capacity varies, While the Organization for Economic Co-operation and Development (OECD) countries</p>                                                                                                                                                                                                                                                                                                                                                                                                                                         |





|  |          |               |       |          |                                                                                                                                                                                                                                                                                                      |
|--|----------|---------------|-------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Regional | Highly likely | Major | High     | are likely to manage if RVF enters, many low- and middle-income countries may not be able to mobilize adequate resources.<br>Although RVF vaccine for animals exists, the quantity of vaccine doses immediately available may not be sufficient compared to the large number of susceptible animals. |
|  | Global   | Likely        | Major | Moderate |                                                                                                                                                                                                                                                                                                      |

### Major actions recommended by the risk assessment team

|                                     | Action                                                                                                 | Timeframe      |
|-------------------------------------|--------------------------------------------------------------------------------------------------------|----------------|
| <input type="checkbox"/>            | Refer the event for review by IHR Emergency Committee for consideration as a PHEIC by DG (Art 12, IHR) | Not applicable |
| <input type="checkbox"/>            | Immediate activation of ERF response mechanism (IMS) as urgent public health response is required      | Not applicable |
| <input checked="" type="checkbox"/> | Recommend setting up of grading call                                                                   | Immediate      |
| <input type="checkbox"/>            | Immediate support to response (no grading recommended at this point in time)                           | Not applicable |
| <input type="checkbox"/>            | Rapidly seek further information and repeat RRA (including field risk assessment)                      | Not applicable |
| <input checked="" type="checkbox"/> | Support Member State to undertake preparedness measures                                                | Continuous     |
| <input checked="" type="checkbox"/> | Continue to closely monitor                                                                            | Continuous     |
| <input type="checkbox"/>            | No further risk assessment required for this event, return to routine activities                       | Not applicable |

\*If chosen, list actions and identify **persons responsible and due dates** for each action in section 2 (Supporting information)

## Supporting information

### Hazard assessment

Rift Valley fever (RVF) is a vector-borne viral zoonosis that poses a significant risk to both animal and human health and livestock production, impacting livelihoods due to death and abortion among RVF-infected livestock. The RVF virus belongs to the Phlebovirus genus. Phylogenetic studies have identified 15 distinct lineages (A-O). These lineages are not geographically restricted and can be found across multiple regions. The main RVF virus (RVFV) vectors are mosquito species belonging to the *Aedes* genera, *Culex* spp, and *Anopheles*, however, RVFV has been detected in over 50 mosquito species and other blood-feeding insect species. RVF virus persists through transmission between vectors and hosts and maintains through vertical transmission in *Aedes* mosquitoes. RVF outbreaks are closely linked to climatic conditions that favour vector breeding and survival. In animals, RVF is characterized by fever, severe illness, weakness, abdominal pain, abortions, high neonatal mortality, with variable morbidity and mortality depending on the species, age, and breed. Recent heavy rainfall and floods may facilitate hatching of RVF-infected mosquito eggs in areas where RVF has been reported in the past. RVF primarily affects domesticated ruminants (small ruminants, cattle, dromedary) but can also cause severe illness in humans. Animal outbreaks are usually detected through high rates of abortion and mortality in infected livestock, particularly in small ruminants, which can have significant socio-economic consequences.

Most human infections result from direct contact with the blood or organs of infected animals. The virus can be transmitted to humans through the handling of animal tissue during slaughtering or butchering, assisting with animal births, conducting veterinary procedures, or from the disposal of carcasses or foetuses. Certain occupational groups such as herders, farmers, slaughterhouse workers, and veterinarians are therefore at higher risk of infection. There is some evidence that humans may become infected with RVF by ingesting unpasteurized or uncooked milk of infected animals. Human infections have also resulted from the bites of infected mosquitoes, most commonly *Aedes* and *Culex* mosquitoes and the transmission of RVF virus by hematophagous (blood-feeding) flies is also possible. To date, no human-to-human transmission of RVF has been documented, and no transmission of RVF to health care workers has been reported when standard infection control precautions are in place.

RVF is a WOA-listed disease and animal events must be reported to WOA as indicated in the WOA Terrestrial Animal Health Code Chapters 1.1 and 8.15.



Several vaccines for use in animals are available but are not used on a wide scale, since RVF outbreaks occur in irregular cycles. Additionally, some vaccines are contraindicated in pregnant animals which limits feasibility of large-scale campaigns. Therefore, many countries do not implement vaccination between outbreaks. Nonetheless, vaccination of livestock during interepidemic or ahead of outbreaks is highly recommended in preventing RVFV infection and virus spread. There is currently no licensed human vaccine for RVF.

## Exposure assessment

### SENEGAL

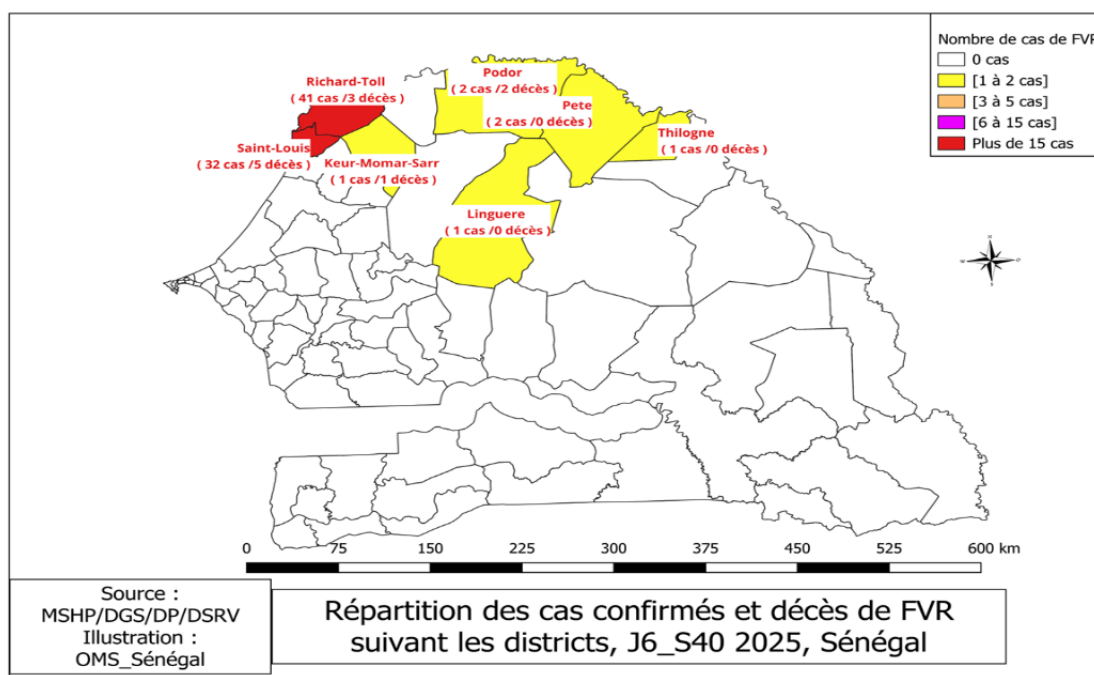
#### Outbreaks in humans:

From 20 September through 8 October 2025, Senegal reported 119 confirmed human RVF cases, including 16 deaths, resulting in a CFR of 13.4%. Cases were recorded across eight health districts in three regions of Senegal. The majority of cases were reported in the Saint-Louis Region, which accounted for 110 cases (92%), with district Richard-Toll reporting 62 cases (52%), followed by Saint-Louis district, 38 cases (32%), and Dagana, six cases (5%), and Pete and Podor reporting two cases each (1,7%). In the Louga Region, four cases were reported in the Linguere district, three cases (2,5) and one in Keur Momar-Sarr (0,8%). In the Matam region, one case was reported in Thilogne.

The most affected age groups were 15- 35 years: 69 (58%), and 35-60 years: 34 (29%). In terms of gender distribution, 77 cases (65%) were male. Among the total 119 confirmed cases, 22 cases (18%) presented with hemorrhagic symptoms, of which 13 died. This distribution highlights a strong clustering of cases in the northern districts along the Senegal River, consistent with RVF endemicity in these areas.

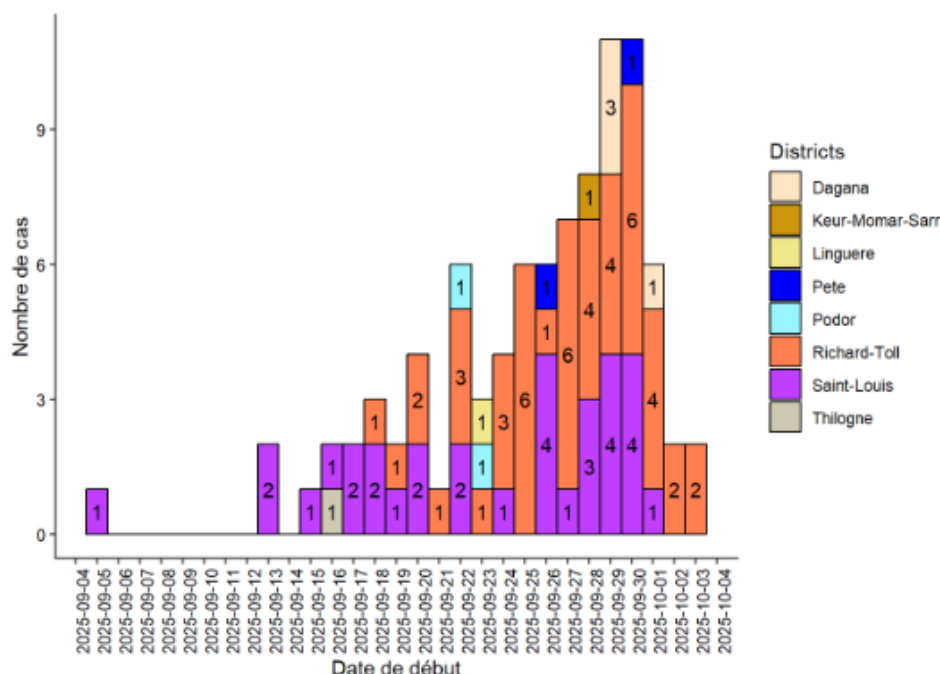
The last confirmed RVF human case in Senegal prior to the current outbreak was reported in January 2025 in Touba, located in the Diourbel region. The last recorded case in Saint-Louis occurred in 2022.

**Figure 1: Number of human RVF cases and deaths in affected health districts in Senegal, as of 3 October 2025**





**Figure 2: Epidemiological curve of RVF human cases per health district in Senegal, from 4 September to 3 October 2025**



### Animal outbreaks:

Abortions and livestock mortality have been reported in areas affected by the current outbreak. On 23 September, a total of 1122 blood samples and four abortion samples were collected from 22 herds in villages where human cases had been reported. Of these 36 samples tested positive across six herds. By 30 September, a total of 27 confirmed animal cases, and two deaths were reported to WOA. RVF is endemic in Senegal, with several past outbreaks affecting both animals and humans. The country has a large population of small ruminants (over 15 million heads), and cattle (nearly 5 million heads), all of which are susceptible to RVF infection. Most animals are reared under extensive pastoral and agro-pastoral systems, with animals grazing in open environments and sharing water sources with wildlife, hence conditions conducive to mosquito-borne transmission. Animal population immunity is low as routine vaccination against RVF is not practiced. In addition, transhumant corridors and cross-border grazing zones increase exposure by mixing of herds from multiple areas and facilitating virus spread.

## Mauritania

### Outbreaks in humans

From 27 September through 5 October, Mauritania reported 17 confirmed human RVF cases, including eight deaths (CFR: 47%). A total of 66 samples were tested, with a positivity rate of 25.7%. The confirmed cases are reported across seven districts (moughataas) in five regions (wilayas): Assaba, Brakna, Trarza, Tagant, and Hodh El Gharbi. Assaba borders Mali to the south, while Brakna and Trarza both border Senegal along the Senegal River.

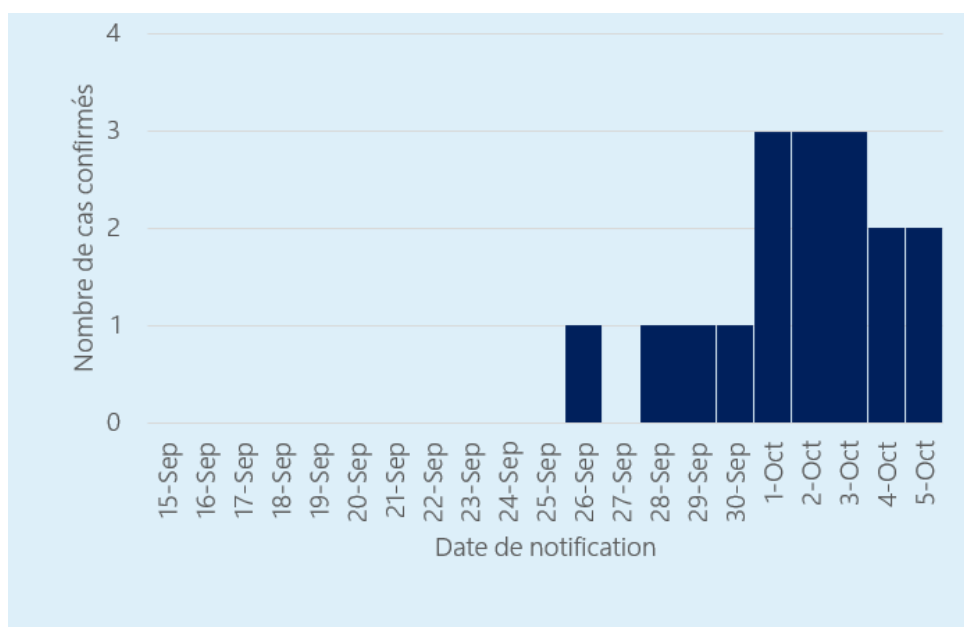
At the district level cases are reported in Maghta Lahjar (six cases), Rosso (three cases), Aleg (three cases), Kiffa (two cases), R'Kiz, Ksar and Moudjeria (one case each). The distribution indicates widespread occurrence across multiple districts, rather than clustering in a single location. As of this 8 October 2025, nine cases remain hospitalized.

RVF is endemic in Mauritania. The most recent major outbreak occurred in 2022, with 47 confirmed human cases including 23 deaths (CFR 49%), mainly among animal breeders, and affecting nine of Mauritania's 15 regions



(wilayas). The animal outbreaks were also reported in cattle, camels, and small ruminants, with positivity rates of approximately 24% in tested samples.

**Figure 3: Epidemiological curve of RVF human cases in Mauritania from 26 September to 5 October 2025**



### Animal outbreaks

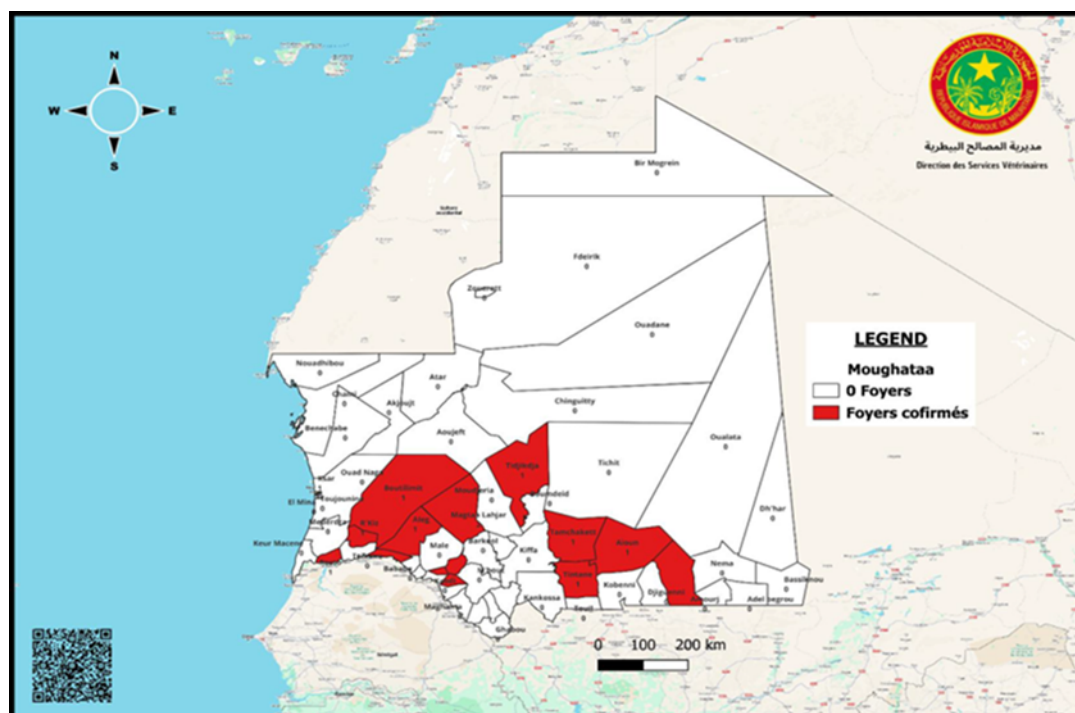
The first outbreak of the disease was recorded on 15 September 2025, in the village of Cham, in the Dar El Barka municipality of the Bokki district, Brakna region (wilayas). As early as August, veterinary services initiated sentinel surveillance, monitoring 32 small ruminant herds in wetlands across the country. This surveillance identified two additional outbreaks in Mektaa Lahjar and Tamchekett. Initial confirmed cases in animals, included goats and camels, were reported in August and later another outbreak in September.

As of 4 October 2025, a total of 17 animal outbreaks had been recorded across 15 districts in eight provinces. At the time of assessment, a total of 39 clinical cases have been confirmed in livestock. These cases were reported in Aioun, Hodh-Gharbi region and Timbedra, Hodh-Charghi region, which are located in southeastern Mauritania near the Mali border, and in Maghta Lahjar (Brakna), located in central Brakna, which does not directly border Senegal or Mali. Additionally, a third outbreak is suspected (test results pending) in Magtaalhja, in the Brakna region, affecting dromedaries.

Mauritania has a large population of small ruminants (more than 18 million heads), cattle (nearly 2 million heads) and camels (about 1.5 million heads), which are all susceptible to RVF infection. Most animals are reared under extensive pastoral and agro-pastoral systems, with animals grazing in open environments and sharing water sources with wildlife, hence creating conditions conducive to mosquito-borne transmission. Animal population immunity is low as vaccination against RVF is not routinely practised. Transhumant corridors and cross-border grazing zones increase exposure by mixing herds from multiple areas and facilitating virus spread.



Figure 4: RVF outbreaks in animals in Mauritania, as of 6 October 2025



## Context assessment

### Senegal:

The current RVF epidemic, affecting eight districts (Keur-Momar-Sarr, Linguere, Pete, Podor, Richard-Toll, Saint-Louis, Dagana, and Thilogne, across three regions (Saint Louis, Louga and Matam) along with numerous animal outbreaks, poses a significant risk of further national and regional spread. This is due to a combination of environmental factors and animal migration flows toward affected regions. However, the upcoming cooler season (November–February) could limit disease transmission due to a reduction in mosquito proliferation. While the scale of the current outbreak is concerning, this epidemic is not unusual in either Senegal or Mauritania. Both countries have already experienced RVF outbreaks in 1987, 1998, 2010, 2012, 2015, 2019, 2020, and 2022, affecting several regions.

The recent heavy rainfall and flooding have favoured the expansion of breeding sites for *Aedes* and *Culex* mosquitoes, increasing both vector abundance and survival. This, along with the presence of susceptible livestock populations in the affected areas, may favour further spread of the disease.

The precarious environmental conditions (weak hygiene and sanitation services) in affected and exposed localities, contribute to the proliferation of vectors and the spread of the virus.

Populations in the affected wilayas and regions, mostly herders and farmers, depend on dairy and meat products as their main source of income.

In response to the outbreak, Senegal has implemented peri-focal vaccination effort in areas around confirmed RVF outbreaks in animals, with a total of 4372 animals (cattle and small ruminants) vaccinated to date.





Figure 5: Heavy rainfall map ([source: FEWS NET Global Weather Hazards Summary 2](#) - as of 8 October 2025)



Figure 6: FAO Empres-i+ map with RVF confirmed and suspected animal and human cases since January 2025, as of 5 October 2025



## Mauritania:

In Mauritania, RVF outbreaks have been recurrent, with the first major outbreak recorded in 1987 following the construction of the Diama Dam in the lower Senegal River basin. The resulting ecological and environmental changes favoured mosquito proliferation and led to a large-scale outbreak, causing 220 human deaths. Since then, RVF epizootics and epidemics have been reported in 1993, 1998, 2003, 2010, 2012, 2013, 2015, 2020, and 2022. Of these, four large outbreaks occurred in 1998, 2003, 2010, and 2012, which caused significant livestock losses and several human deaths.

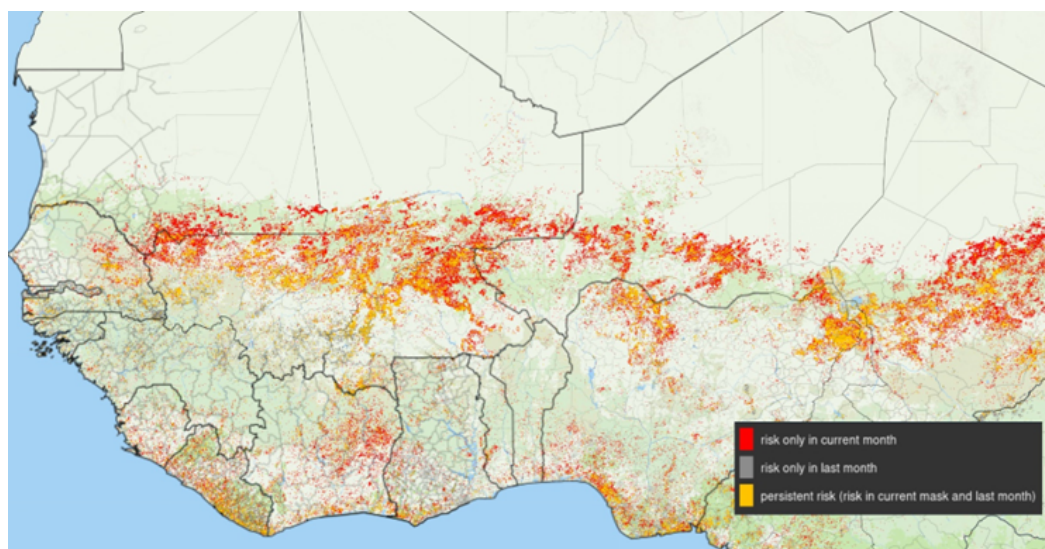




RVF outbreaks in Mauritania typically occur between September and November, primarily affecting sheep, goats, cattle, and camels, with spillovers to human populations often.

In terms of coordination of response activities, a national-level One Health Coordination Committee exists in Mauritania at the central level, but regional coordination structures are lacking. The development and implementation of multisectoral sanitation plans, spraying campaigns in large urban centres, and regular supervision of health districts are still not effective.

**Figure 7: Predicted suitability for RVF vector amplification in Western Africa for September 2025. FAO (2025). Rift Valley fever Early Warning Decision Support Tool (RVF DST).**



### Neighbouring countries

The risks of spread to neighbouring countries such as Mali must also be considered, given close cross-border ties through trade and agro-pastoralism.

| Senegal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Capacities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Vulnerabilities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Coordination</b> <ul style="list-style-type: none"> <li>National and regional incident managers appointed</li> <li>Multisectoral coordination in place (human – animal – environmental sectors) at national and regional level</li> <li>Regular weekly situation reports produced</li> <li>Development of Incident Action Plan launched with government and partner support (FAO, UNICEF, embassies)</li> </ul> <b>Surveillance</b> <ul style="list-style-type: none"> <li>Case detection active and ongoing, identifying occupation/role of most affected groups as part of their data analysis to guide risk comms</li> </ul> | <b>Coordination</b> <ul style="list-style-type: none"> <li>Cross-border coordination with Mauritania and other neighbouring countries is limited</li> <li>Emergency funding and resource mobilization mechanisms are not yet fully secured</li> <li>Delay in information sharing with unaffected areas and neighbouring countries for adequate preparedness and readiness</li> <li>Sustainability beyond October requires ongoing partner mobilization and funding</li> <li>Preparedness and prevention measures in both Mauritania, Senegal, and neighboring countries need to be strengthened to control and prevent the spread of RVF infection</li> </ul> |



### Laboratory

- Testing capacity available at national level (PCR confirmation by Institute Pasteur-Dakar) and also in some regions

### Human Case Management

- National treatment protocols for RVF are in place
- Referral hospitals (e.g., Saint-Louis, Dakar) have trained staff and are managing RVF cases, including patients with haemorrhagic symptoms
- National Emergency Medical Services supporting transfers
- Blood products (platelets, plasma) were reinforced after an initial shortage

### Entomological surveillance and vector control

- Recognized as a priority in the national response framework
- A modelling session is planned to identify hotspots, so surveillance data could guide targeted interventions
- Entomological surveillance underway (mosquito trapping, species identification).
- Targeted spraying and larval site treatment in affected areas

### Risk communication and community engagement

- National authorities launched communication campaigns through radio and community channels in affected regions (ongoing sensitization in households, schools, markets)
- Ministry of Health promptly shares outbreak location through its official Facebook page
- Messaging was tailored to groups most affected (housewives, herders, and students)
- Household visits were conducted and integrated with RCCE activities to reinforce awareness during case follow-up
- Hotline was set up as part of the national risk communication effort to provide information and guidance.

### Vaccination (animal)

- Peri-focal vaccination conducted around RVF outbreaks in animals, with ~14,000 doses allocated, and nearly 5,000 animals vaccinated to date

### Surveillance

- Community-based surveillance needs to be strengthened, to minimize ongoing delays in detection or relaying suspected RVF cases early
- Suspension of sentinel surveillance in domestic and wild animal flocks, due to recent financial constraints
- Collaborative surveillance between different sectors must be established and effective

### Laboratory

- District and regional labs have limited testing capacity for RVF
- Sample transport from remote districts to Dakar is often affected by delays
- Surge testing capacity is limited if suspected case numbers increase

### Human Case Management

- Peripheral and rural health facilities have limited capacity to suspect, recognize symptoms and manage severe RVF cases
- Shortages of essential medicines (e.g., antibiotics, IV fluids and antipyretics), supportive care items and IPC supplies, and PPE, especially at district-level facilities.
- Insufficient blood banks and fragile supply chains limit the availability of adequate blood products

### Entomological surveillance and vector control

- Not yet fully operationalized in the national plan
- Baseline entomological data are limited, and resources for large-scale vector control are lacking.

### Risk communication and community engagement

- Information hasn't reached all rural or nomadic communities
- Lack of community data to drive tailored and localized strategies and better understand community knowledge gaps, concerns, behaviours and barriers to protective action.
- Adapted resources and support for interventions are limited for continuous outreach

### Vaccination (animal)



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>One Health</b></p> <ul style="list-style-type: none"> <li>• GLEWS+ framework activated, Tripartite partners engaged, joint presentations by human and animal sectors</li> <li>• Veterinary services are engaged in the national response, providing updates on investigations and vaccination.</li> <li>• Vet services are doing outreach around vaccination and animal abortions</li> <li>• Investigations carried out in herds from affected villages</li> <li>• Samples collected, tested and confirmed at national veterinary labs</li> <li>• Peri-focal vaccination started</li> </ul>                                                                                                                                                                    | <ul style="list-style-type: none"> <li>• Coverage remains limited and insufficient to contain wider spread due to ongoing supply constraints</li> </ul> <p><b>One Health</b></p> <ul style="list-style-type: none"> <li>• Coordination still mostly at national level; gaps remain in field-level integration</li> <li>• Limited cross-border One Health activities with neighbouring countries.</li> <li>• Integration of risk communication, engagement with affected communities and information flow between human and animal health sectors remains limited (e.g., messaging, co-created adapted and implementable RCCE interventions and surveillance systems)</li> <li>• Veterinary lab capacity outside central facilities is constrained.</li> <li>• Turnaround time for animal sample results is slow</li> <li>• Current capacity is insufficient for widespread livestock testing if the outbreak expands</li> </ul>    |
| <b>Mauritania</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Capacities</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Vulnerabilities</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <p><b>Coordination</b></p> <ul style="list-style-type: none"> <li>• National Incident Management Team (IMT) has been activated</li> <li>• Rapid Response Teams (RRTs) were deployed to support in-depth investigations of suspected cases</li> </ul> <p><b>Surveillance</b></p> <ul style="list-style-type: none"> <li>• Since August, veterinary services have implemented sentinel monitoring of 32 small ruminant herds in wetlands across the country to strengthen early warning for RVF</li> </ul> <p><b>Laboratory</b></p> <ul style="list-style-type: none"> <li>• The National Reference Laboratory for the diagnosis of viral haemorrhagic fevers (VHF) at the INRSP has the required capacity to perform serology and PCR for RVF confirmation</li> </ul> | <p><b>Coordination</b></p> <ul style="list-style-type: none"> <li>• Limited multisectoral coordination: Challenges in harmonizing actions between human health, animal health, and local authorities despite the activation of One Health</li> <li>• Preparedness and prevention measures in both Mauritania, Senegal, and neighboring countries need to be strengthened to control and prevent the spread of RVF infection.</li> </ul> <p><b>Surveillance</b></p> <ul style="list-style-type: none"> <li>• Limited surveillance and diagnostics with late detection, underreporting, reliance on INRSP for PCR confirmation.</li> <li>• Inadequate animal cross-border surveillance.</li> <li>• Inadequate entomological surveillance and vector control.</li> </ul> <p><b>Laboratory</b></p> <ul style="list-style-type: none"> <li>• Lack of RVF diagnostic kits that support health facilities at the county level.</li> </ul> |



### Human Case Management

- Hospitals in affected areas are providing care for RVF cases, with referral pathways activated.

### Entomological surveillance and vector control

- Initial entomological investigations are underway.
- Vector control has been identified as a response need.

### Risk communication and community engagement

- Ministry of Livestock shares outbreak location rapidly through its Facebook

### One Health

- One Health committee meetings are ongoing in the affected regions and moughataas under the coordination of the administrative authorities

- Dysfunctional laboratory sample referral system in humans and animals.
- Turnaround times for results remain slow.
- Veterinary samples are being processed by the National Office for Research & Development of Livestock and Fisheries

### Human Case Management

- Inadequate stockpiles of PPE and essential medicines.
- Low capacity of health care workers to identify and treat patients.
- Inadequate infection prevention and control in treatment structures.

### Entomological surveillance and vector control

- Entomological data are limited, and vector control activities are not yet scaled up.
- Limited mapping and categorization of mosquito vector breeding sites.
- Inadequate stockpiles of larvicides, equipment and trained applicators.

### Risk communication and community engagement

- Rumours and misinformation are widespread. and risk communication has been inadequate to dispel them or to address uneven levels of awareness
- Low involvement of community leaders.
- Need for community data to drive tailored and localized strategies and better understand community knowledge gaps, concerns, behaviours and barriers to protective action.
- Adapted resources and support for interventions are limited for continuous outreach of affected populations

### Vaccination (animal)

- Absence of preventive vaccination against RVF in susceptible livestock, with vaccine supplies insufficient to meet needs.

### One Health

- Limited multisectoral coordination: Challenges in harmonizing actions between human health, animal health, and local authorities despite the activation of One Health



## Immediate actions

### WHO - Mauritania

- Strengthen multisectoral coordination (administrative authorities, health, agriculture).
- Deploy investigation teams in all affected areas.
- Supply PPE and other essential materials.
- Ensure daily monitoring of epidemiological evolution and corrective actions.
- Develop and regularly disseminate specific Situation Reports.
- Integrate the RVF response with Diphtheria and Malaria activities.
- Finalize and operationalize the response plan.

### WHO – Senegal

- Reinforce cross-border collaboration and implement prevention and control measures in border areas.
- Support the procurement of laboratory supplies, reagents and test kits for RVF, case management and IPC items
- Provide technical advice for an effective response.
- Strengthen surveillance activities
- Develop and disseminate regular SitReps
- Monitoring the national operational plan
- Reinforce RCCE activities
- Strengthen vector control

### FAO

- Provided a limited quantity of PPE for vet laboratories (arrived/arriving this week)
- Deploying emergency response mission to Mauritania (tentative from Oct 20-23)

### WOAH

- Contact with the countries to support official notification in WAHIS
- Activation of WOAH Incidence Management System to follow the event and support the Members

## Reference documents used for risk assessment:

- Situation reports  
Senegal [Ministère de la Santé et de l'Action sociale](#):  
<https://www.facebook.com/photo?fbid=1131588912491683&set=a.174013844915866>  
Mauritania Ministry of Health:  
[https://www.facebook.com/photo/?fbid=821682567057815&set=a.113289154563830&locale=fr\\_FR](https://www.facebook.com/photo/?fbid=821682567057815&set=a.113289154563830&locale=fr_FR)
- WHO Rift Valley fever: <https://www.who.int/news-room/fact-sheets/detail/rift-valley-fever>
- Local drivers of Rift Valley fever outbreaks in Mauritania: A one health approach combining ecological, vector, host and livestock movement data: <https://doi.org/10.1371/journal.pntd.0013553>
- Rift Valley Fever Outbreaks in Mauritania and Related Environmental Conditions:  
<https://pmc.ncbi.nlm.nih.gov/articles/PMC3924481/>
- WOAH, WAHIS notifications :  
Senegal: <https://wahis.woah.org/#/in-review/6820>  
Mauritania: <https://wahis.woah.org/#/in-review/6837>
- Unexpected Rift Valley Fever outbreak in Northern Mauritania affects camels, small ruminants and humans. *Emerging Infectious Diseases*. **17**(10) : 1894-1896.
- Metwally, S. Viljoen, G. & El Idrissi, A. (eds.) 2021. Veterinary- vaccines:- principles- and applications. Chichester, John Wiley & Sons Limited and FAO  
<https://openknowledge.fao.org/handle/20.500.14283/cc2031en>
- FAOSTAT [<https://www.fao.org/faostat/en/#data/QCL>]