





Monthly Epidemic Intelligence Report

Issue 21

September 2025





Definitions

The below is a list of commonly referred to terms and keywords in the monthly reports.

Gulf Public Health Emergency Network (PHEN)

A group of technical individuals within GCC health authorities, nominated to represent each GCC country. The composition typically includes International Health Regulations Focal Point, Ministry of Health Communicable Disease Directors and National Public Health Laboratory Directors or appointed representatives on their behalf. The Gulf CDC serves as the Network's secretariat with the PHE Department Director chairing the network meetings.

Hazard

A source/incident that has the potential to cause morbidity (including injury) or mortality in an exposed human population.

Signal

An incident/situation involving a hazard that has occurred. Signals are typically news/updates identified through Event-Based Surveillance and Indicator-Based Surveillance, utilizing both official and non-official sources. Signals can be of a disease origin or a CRNE (Chemical, Radiological, Nuclear, or Environmental) origin.

Threat

Any threat that has been confirmed by the PHEN to have the potential to pose a near-future risk to the GCC countries' populations and could be monitored closely by Gulf CDC for 2 weeks.

Event of Regional Interest

Any threat, inside or outside the GCC, that has been identified by the Public Health Emergency Network to pose a certain type of risk for the GCC countries' public health. For these threats, Gulf CDC produces regular risk assessments and recommendations for their control, as well as enhances daily monitoring of it to provide regular situational updates to the GCC countries.

Rapid Risk Assessment

A prompt evaluation of the level of health risk in relation to a verified acute event within a short time frame, mainly for situation update, risk level determination and recommendation to support the GCC countries in risk communication and management.

		GULF CD	C Risk Scale		
Negligible	Very Low	Low	Moderate	High	Critical

Country names in this report are as per the UN list.





Summary of the Month

This monthly report provides an overview of the signals, potential threats, and specifically Events of Regional Interest detected and identified through the Gulf CDC Epidemic Intelligence system during the month of **September 2025** (August 24 – September 23, 2025). *

34 Signals 2 Events of Regional Interest

Executive Summary

Signals: This month, the Epidemic Intelligence team at Gulf CDC detected a total of 34 signals. Of these, 30 were related to infectious diseases, 3 to food contamination, 1 to an environmental hazard (radioactive material). Among the infectious disease signals, 16.7% were associated with dengue, 10% were associated with mpox, and 10% with West Nile virus.

This month, 2 signals were detected within GCC countries: 2 food contamination incidents, one reported in Saudi Arabia and one in Kuwait. In neighboring countries, 14 signals were identified: Iraq (Crimean-Congo haemorrhagic fever and food contamination), Palestine (unspecified influenza), Pakistan (wild poliovirus type 1), Sudan (cholera), Yemen (dengue, malaria, measles and West Nile virus), Iran (dengue), and Israel (West Nile virus).

Events of Regional Interest: The Gulf CDC continued to monitor two events of regional interest in September: highly pathogenic avian influenza (H5N1) globally and mpox globally.

^{*} Monthly reports cover data from the 24th of the previous month to the 23rd of the reported month, ensuring there is no gap in reported data.

The details of the detected signals and identified threats are shared weekly with the GCC Member States' technical representatives in the Gulf Public Health Emergency Network (PHEN) (available on this link) and are presented and discussed in weekly roundtable discussions. These are often verified through secondary research of communication with regional and international partners. In consultation with the PHEN members, a potential threat is escalated to an Event of Regional Interest based on its anticipated potential for causing a public health emergency in the GCC region.





Signals

The Gulf CDC monitors the globe for daily, weekly, and monthly disease signals. Based on Gulf CDC analysis, certain signals may be designated as threats and/or events of regional concern, depending on their risk level, impact, and likelihood. As outbreaks evolve, new diseases may be added to this list. Some diseases may also be removed if the risk they pose reduces below our threshold.

Threats are identified based on several considerations such as high connectivity between reporting country and the GCC countries, level of transmissibility of pathogens, vulnerability degree of GCC populations to the identified hazard, capacity levels of GCC health systems to respond to the identified hazard.

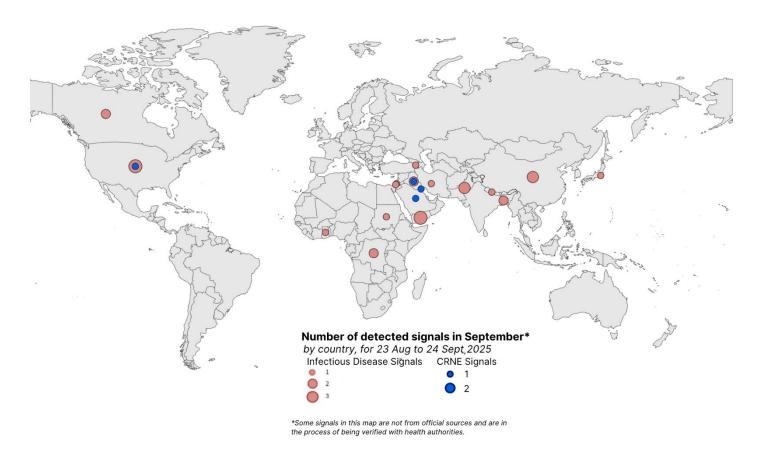


Figure 1: Number of detected signals and potential threats by the Gulf CDC from 24 August to 23 September 2025.

Please note that the size of dots noting detected signals corresponds to the number of signals in the country, not the cumulative number of detected signals globally.





Highlights of Signals Identified in September 2025

- Poliovirus (WPV1) in Pakistan: As of 15 September, Pakistan has reported 26 cases of wild poliovirus type 1 in 2025, following confirmation of new infections in children under 2 years. A 20-month-old girl from Tank district in northern Khyber Pakhtunkhwa province, a 19-month-old girl from the North Waziristan district and an 11-month-old girl from the Lakki Marwat District. In response, health authorities launched a nationwide door-to-door immunization campaign from 15-18 September, aiming to vaccinate more than 28 million children under five years of age. (The Peninsula, 2025) (Geo News, 2025)
- Malaria in Yemen: An editorial article in the Journal of Epidemiology and Global Health highlighted Yemen's escalating malaria crisis. It is reported that nearly two-thirds of the population remain at risk for infection with most of the confirmed cases caused by *Plasmodium falciparum*. Conflict, displacement, and a weakened health system have severely undermined malaria surveillance and control efforts. The establishment of the urban malaria vector *Anopheles stephensi* in southern Yemen further heightens concern, suggesting the need for increased awareness in the GCC countries. (Ebrahim, et al., 2025)
- Contaminated food in Saudi Arabia: On 18 September 2025, the Saudi Food and Drug Authority (SFDA) issued a warning against "Altarouti" brand Chicken Frankfurt after laboratory tests confirmed contamination with *Staphylococcus aureus* bacteria. The SFDA has withdrawn the product from the market, suspended the factory's production line, and initiated legal action, noting possible penalties including imprisonment and/or fine. (Saudi Food and Drug Authority , 2025)
- Mpox is no longer a Public Health Emergency of International Concern (PHEIC) as per the WHO: On 5 September 2025, the WHO declared that mpox is no longer a global PHEIC (WHO, 2025). As a result, mpox will no longer be an active Event of Regional Interest for the Gulf CDC. The Gulf CDC however will continue scanning for related signals.





Events of Regional InterestHighly Pathogenic Avian Influenza H5N1



Globally

Negligible Very Low Low Moderate High Critical

Gulf CDC Risk Assessment of this Event – 6 August 2024

- **Risk Question:** What is the likelihood of Highly Pathogenic Avian Influenza (HPAI) H5N1 human-to-human transmission occurring in the GCC countries and what is the impact of that transmission?
- **Impact:** Moderate. Despite the global unavailability of specific antiviral drugs for HPAI H5N1, case management capacities of the GCC countries for influenza infections are generally high.
- **Likelihood:** Unlikely. The likelihood of HPAI H5N1 importation to the GCC countries from the United States (US) is unlikely given the low number of cases. Further, there is no evidence of human-to-human transmission at this time.

Please refer to the <u>Gulf CDC Rapid Risk Assessment</u>: Highly Pathogenic Avian Influenza H5N1 for further details (Authorized access only).



Why is this Notable?

The Gulf CDC EI team escalated the HPAI H5N1 outbreaks in the United States of America (US) to an event of regional interest on 3 August 2024. The Gulf CDC has detected new signals of HPAI H5N1 infections caused by contact with infected cattle in multiple states within the US.



Key Stats

28 confirmed cases

of HPAI H5N1 in humans globally in 2025







Key Factors of Concern for HPAI H5N1

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Disease severity

Avian Influenza H5N1 with a severe pathogen severity level. The mortality rate for this infection can be as high as 60%. Infection is mainly through contact with infected poultry, however there are growing concerns that this virus could mutate and cause more efficient human-to-human transmission.



Trends from previous outbreaks

In 2023, there were 12 reported human cases of HPAI H5N1 across 4 countries (Cambodia, China, Chile, the United Kingdom). In years prior, there have been small numbers of sporadic human cases of H5N1 infection reported across several countries.

In 2024, the HPAI H5N1 outbreak in cattle in the US caused human infection cases of H5N1 to significantly increase. Additionally, multiple other countries reported cases of human infections.



Healthcare capacity

All GCC countries have set up infectious disease programs or services for zoonoses, but lack strategic plans or programs needed to control and prevent the spread of avian influenza. For example, there are limited systems in place developed for ensuring regular collaboration and coordination between the Health and Agricultural sectors. The resulting detection delay may lead the infected individual seeking healthcare at a later stage of infection, risking further complications and more severe symptoms. While recently circulating clades of the H5N1 virus have not been detected in Gulf countries, the connectivity to other countries through agricultural trade and bird migration increases the likelihood of importation of the virus, and the possibility of spillover to humans (particularly those in close contact with poultry). Please refer to the Gulf CDC Rapid Risk Assessment on Avian Influenza H5N1 (6 August 2024) for further details.

In November 2024, the Gulf CDC and GCC Member States conducted a regional simulation exercise, using H5N1as the scenario to simulate and test the Public Health Emergencies Response Coordination Plan and identify areas of cooperation, communication channels, and potential gaps.



Connectivity to the Gulf Region

While the US is highly connected via air travel to the Gulf Region, the low number of cases in humans and the current lack of evidence for human-tohuman transmission makes the importation through humans unlikely.







Situational Highlights for HPAI H5N1

Epidemiological situation in humans:

 Since the last update, no new confirmed cases of HPAI H5N1 have been reported in humans (as of 23 September). The total number in 2025 remains 28 confirmed cases, including 9 deaths. In 2024, there were 80 confirmed cases of HPAI H5N1.

Table 1. Confirmed cases of HPAI H5N1 infections in humans in 2025, globally (as of 23 September 2025)

Country	Cases	Deaths	Clade(s)	Exposure(s)	
Cambodia	15	7	2.3.2.1e*	Backyard poultry, suspected	
				infected birds	
United States	5	0	2.3.4.4b	Dairy cattle, backyard poultry,	
Officed States	11ed 3tates 3 0 2.3.4.4b		and unknown		
Bangladesh	3	0	2.3.2.1a	Under investigation	
United	1	0	2.3.4.4b	Farm birds	
Kingdom	'	O	2.3.4.40		
Mexico	1	1	2.3.4.4b	Under investigation	
India	1	1	2.3.2.1a	Suspected raw poultry meat	
Vietnam	1	0	2.3.2.1c	Suspected backyard poultry	
China	1	0	Not specified	Domestic poultry	

^{*}The clade of the latest two cases reported in July hasn't been published yet.

- United States: On 5 September 2025, the US CDC advised the public to avoid raw milk and unpasteurized dairy products due to the low but possible risk of H5N1 avian influenza infection through the gastrointestinal route (Schnirring, 2025).
 - While no human cases have been directly linked to consuming contaminated raw milk, infections were confirmed in cats. Animal studies suggest that non-respiratory transmission is biologically plausible.

• Epidemiological situation in animals:

- o **Chile**: On 25 August 2025, the Agricultural and Livestock Service (SAG) has suspended imports from Argentina (Vallejos, 2025).
 - According to the SAG, this decision was motivated by the detection of highly pathogenic avian influenza on a commercial farm in the Los Toldos sector in the province of Buenos Aires, Argentina.
- Spain: The Ministry of Rural Affairs detected 5 new cases of avian influenza in wild seagulls on 28 August. The animals were transferred to Wildlife Recovery Centers, for testing before the carcasses were disposed (ACORUÑAXA, 2025).
 - These 5 positive cases constitute the first confirmed outbreak of wild birds in Galicia, however, no additional restrictions to those in place in municipalities declar3ed Special Risk zones have been implemented (Faro De Vigo, 2025).





- Additionally, on 6 September, Spain's Ministry of Agriculture confirmed an outbreak of HPAI H5N1 in Pozo de Guadalajara, affecting a poultry meat farm (Pintado, 2025).
 - Authorities activated containment measures immediately upon suspicion, even prior to laboratory confirmation, to prevent spread to nearby farms.
 - Confirmation of H5N1 was issued by the Algete Central Veterinary Laboratory.
- o In two months, Spain has confirmed 35 cases of H5N1. Outbreaks in poultry were detected in 4 regions of the country, in addition to 31 outbreaks in wild birds.
 - As a result, the Ministry of Agriculture declared an alert level 2 in the region of Andalusia and has temporary closed parks in Seville, following the appearance of dead birds.
 - Increase in cases had previously been seen later in the year, following migratory bird patterns. Researchers at the Center for Animal Health Research (CISA-INIA) expect outbreaks in the wild to continue through September and into October as peak migratory activity begins (SINC - Servicio de Información y Noticias Cientificas, 2025).
- United Kingdom: HPAI H5N1 was found in captive birds at a premises near Evercreech in Somerset on August 28 (Chaffey, 2025).
 - According to Defra and the Animal Plant Health Agency, a 3 km captive bird (monitoring) controlled zone has been declared around the premises and the affected birds will be culled.
- o **Bolivia**: The National Service for Animal Quality and Health issued a high alert after the confirmation of a case of avian influenza in birds in Santa Cruz, Bolivia (ABC, 2025).
- United States: On 16 September 2025, HPAI was confirmed in a commercial turkey flock in Redwood County, Minnesota, affecting about 20,000 turkey toms (Callahan, 2025).
 - This is the first poultry detection in the state since April 2025. Authorities had aimed to declare the state free of the disease as of 25 August. This detection resets the state's response teams.
 - The USDA's National Veterinary Services Laboratories is working to classify the virus strain. State officials reactivated response teams; biosecurity measures and poultry health monitoring have been emphasized to poultry farmers.

• Recent findings:

- A recent study published in Nature tested an inactivated whole-virus H5N1 vaccine in cynomolgus macaques showing showed strong, long-term protection against virus challenge. One dose of the vaccine was able to prevent serious lung illness caused by H5N1 even five years later. This suggests that whole-virus vaccines could be induce longlasting protection against avian influenza in humans.
- One animal study looked at H5N1 viruses taken from infected cows and birds to see if they could spread to humans. The cow viruses caused severe illness in mice and ferrets





and were able to grow in human lung cells. They spread through direct contact but not through the air. They still responded to approved treatments and vaccines.

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Globally

Negligible Very Low Low Moderate High Critical

Gulf CDC Risk Assessment of this Event - 2024

- **Risk Question:** What is the likelihood of importing a mpox clade lb case into the GCC causing an occurrence of subsequent cases in the GCC in the next 3 months?
- **Impact:** Moderate, With the low transmission potential of the virus in the Gulf communities, and the high national capacities established for mpox prevention and control, the level of potential impact of mpox has been characterized as moderate.
- **Likelihood:** Likely, as there is a large volume of travelers to the Gulf from countries reporting mpox clade Ib cases, it is likely that unlinked cases/clusters to be detected within the next 3 months.

Please refer to the <u>Gulf CDC Rapid Risk Assessment</u>: Mpox for further details (authorized access only).



Why is this Notable?

The Gulf CDC EI team escalated the global mpox to an event of regional interest on 14 August 2024 due to an increase in the expected incidence of epidemic activity. The same date, WHO declared mpox as a public health emergency of international concern (PHEIC) for the second time. On 5 June 2025, the WHO Director-General announced the upsurge in cases continued to meet the criteria of a PHEIC.



Key Stats

8 mpox clade I cases*

Linked to travel reported in the GCC region in 2025

*the last reported mpox clade I case in the GCC region linked to travel was in April 2025 (WHO, 2025)







Key Factors of Concern for Mpox



Disease severity

Severe complications of mpox may include secondary bacterial infections, pneumonia, sepsis, and encephalitis; immunocompromised individuals are particularly susceptible to severe infections.

Mpox viruses (MPXV) can be divided into two distinct clades, clade I and clade II, with clade II being further divided into the clade IIa and clade IIb subclades. Clade I is predominantly found in central Africa around the Congo basin while clade IIa is found in West Africa. Clade IIb however, was able to spread and cause outbreaks globally in 2022.

Clade I has been shown to cause more severe disease than clade II, with case fatality rates (CFRs) of approximately 10% and 1%, respectively.



Trends from previous outbreaks

Although ongoing human-to-human transmission of mpox in the DRC has been documented since the 1970s, there are still gaps in knowledge of all the transmission dynamics involved. Initially, infections happened within minor domestic or local clusters, which were believed to be predominantly caused by animals to human-transmission. Sexual transmission of the MPXV clade I was not officially reported until April 2023. Most cases in the multi-country outbreak (non-endemic) in 2022 due to an infection with a clade II, lineage B.1, virus or its descendants, while the current outbreaks in several countries in Africa (DRC, Uganda, Kenya, Rwanda, Burundi) are primarily caused by MPXV clade I.



Healthcare capacity

Within the DRC where cases of MPXV clade I are highest, testing in rural areas is limited. Nationally only 24% of the clinically compatible (reported as suspected) cases have been tested in 2024. And of those tested approximately 65% were positive. Surveillance and response capacity were strengthened in 2024 within the DRC by government initiatives with the aid of institutions such as the WHO, particularly in the most affected provinces such as South Kivu. Risk communication has also been updated and increased to inform the population about the risks and precautions to take to avoid acquiring mpox. The Interim Medical Countermeasures Network (i-MCM-Net), that the Gulf CDC participates in, established an access and allocation mechanism for the mpox response. As of 27 September 2024, 2.7 million MBA-BN, 3 million LC16 and 50,000 ACAM2000 vaccines had been pledged by both public and private donors.

Countries outside of Africa that have imported mpox clade Ib cases have so far managed to contain cases to households and close contacts.







Connectivity to the Gulf Region

Below are the forecasted passenger volumes between the 5 African countries reporting the highest number of mpox clade I cases in 2025, and the Gulf region during September 2025 (BlueDot, 2025):

	DRC	Burundi	Uganda	Kenya	Zambia
UAE	-	-	3,869	19	11
Bahrain	9	4	92	32	35
Saudi Arabia	110	253	2,969	326	405
Oman	23	32	104	140	91
Qatar	7	44	1,735	163	357
Kuwait	25	8	162	110	67

Connections between the above-mentioned countries and the region are primarily counted based on airline data. Other routes of entry and illegal migration might contribute to the importation likelihood.

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Situational Highlights for Mpox

- On 5 September 2025, the WHO declared that mpox is no longer a global Public Health Emergency of International Concern (WHO, 2025).
 - Despite the downgrade, the WHO has urged countries to maintain vigilance due to ongoing transmission risks and the need for eradication efforts.
 - o In contrast, the Africa CDC has maintained its continental emergency declaration and will review its status in three months (Cohen, 2025).
- New and suspected cases of mpox clade I outside Africa
 - China: The health bureau confirmed Macau's third mpox case since 2023. The patient is a 29-year-old local man who developed fever, sore throat, and diarrhea on 24 August 2025. The case has been classified as imported (Macau Daily Times, 2025).
 - Türkiye: Türkiye has notified the WHO of a single mpox case diagnosed in late July 2025, involving an adult male with a travel history to the Middle East. This brings the country's total to three mpox cases caused by clade Ib MPXV in 2025 (WHO, 2025).
- **Mpox cases in Africa:** As of September 2025, Africa CDC has reported a 50% drop in mpox cases since the spring. However, new hotspots are emerging in Liberia, Ghana, and Guinea, prompting the need for vigilance (Cohen, 2025).



Table 2. Cumulative number of confirmed mpox cases and deaths reported by African countries, 2025 (Africa CDC, 2025)

Country	Confirmed cases*	Deaths among confirmed cases
Angola	8	0
Burundi	1,503	0
Cameroon	5	0
Central African Republic	28	1
Congo	69	1
Côte d'Ivoire	79	1
Democratic Republic of		
Congo	16,113	95
Ethiopia	28	1
Ghana	512	1
Guinea	963	1
Kenya	472	8
Liberia	745	0
Malawi	112	1
Morocco	2	0
Mozambique	79	0
Nigeria	336	4
Rwanda	45	0
Senegal	1	0
Sierra Leone	5,292	56
South Africa	11	0
South Sudan	21	0
Tanzania	151	0
Togo	77	0
Uganda	6,684	43
Zambia	233	3

^{*}Africa CDC defines confirmed cases as laboratory confirmed.

- Senegal: On 23 August 2025, the Ministry of Health and Social Action announced the detection of a confirmed case of mpox in Dakar (Tine, 2025).
 - According to the official statement, he is a foreign national who entered Senegal on August 19.
 - The ministry said it had immediately deployed all the necessary measures to prevent any spread of the disease on the national territory.
- Mozambique: On 25 August 2025, the Mozambican health authorities recorded 16 new cases and 28 suspected cases of mpox in the northern province of Niassa (Club of Mozambique, 2025).
 - To date, there have been no recorded deaths associated with the disease, while
 32 people have made a full recovery.





- Ghana: The Ghana Health Service has announced the detection of 22 new mpox cases mpox, pushing the country's total to 446 infections as of 25 August 2025 (Babantsi, n.d.).
 - According to the Health Service, there have been no additional deaths or hospital admissions. Thus, there is still only one death reported nationally.

Recent Findings

- Scientists at the National Public Health Institute of Liberia have identified and characterised the mpox clade IIa strain through genome sequencing of clinical samples (Front Page Africa, 2025).
 - Their analysis found no evidence of sustained human-to-human transmission, suggesting independent zoonotic spillovers from a diverse viral lineage.
 - Public health officials should continue monitoring and sequencing efforts to identify emerging monkeypox virus lineages.





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The Gulf CDC is grateful for insights on GCC countries' capacities and national data provided by members of the Public Health Emergency Network members. This provided valuable contextual understanding that enhanced the PHE team's assessment of risk posed by the hazards detected.

In addition, the Gulf CDC acknowledges the insights provided by international and GCC subject matter experts on reviewing risk assessment reports and on sharing best practices and lessons learned to improve preparedness for the hazards detected.

For queries regarding this publication, please contact us at eidetect@gulfcdc.org







References

- ABC. (2025, September 1). Senacsa activa alerta máxima por nuevo brote de gripe aviar, esta vez en Bolivia. (ABC) Retrieved September 23, 2025, from https://www.abc.com.py/nacionales/2025/09/01/senacsa-activa-alerta-maxima-por-nuevo-brote-de-gripe-aviar-esta-vez-en-bolivia/
- ACORUÑAXA. (2025, August 28). *Five cases of avian flu detected in wild seagulls in Galicia*. (ACORUÑAXA) Retrieved September 23, 2025, from https://acorunaxa.com/es/news/detectados-cinco-casos-de-gripe-aviar-engaviotas-silvestres-en-galicia/104237/
- Africa CDC. (2025, September 23). *Africa CDC Epidemic Intelligence Weekly Report, September 2025*. Retrieved September 23, 2025, from https://africacdc.org/download/africa-cdc-epidemic-intelligence-weekly-report-september-2025/
- Babantsi, M. X. (n.d.). *Ghana confirms 22 new Mpox cases, total infections hit 446*. Retrieved from https://www.pulse.com.gh/articles/news/ghana-confirms-22-new-mpox-cases-total-infections-hit-446-2025083008461889325
- BlueDot. (2025, September 19). *Forecasted Air Travel Volumes*. (BlueDot) Retrieved September 19, 2025, from https://portal.bluedot.global/
- Callahan, D. (2025, September 17). *Avian flu makes reappearance in Minnesota at Redwood County turkey farm*. (Minnesota Board of Animal Health) Retrieved September 23, 2025, from https://bah.state.mn.us/Avian-flu-makes-reappearance-in-Minnesota-at-Redwood-County-turkey-farm
- Chaffey, J. (2025, September 1). *Bird flu confirmed at premises in Evercreech, Somerset*. (Somerset County Gazette) Retrieved September 23, 2025, from https://www.somersetcountygazette.co.uk/news/25430338.bird-flu-confirmed-premises-somerset-devon/?ref=rss
- Club of Mozambique. (2025, Aug 25). *Mozambique: 16 new cases of mpox diagnosed in Niassa AIM*. (Club of Mozambique) Retrieved September 23, 2025, from https://clubofmozambique.com/news/mozambique-16-new-cases-of-mpox-diagnosed-in-niassa-aim-290100/
- Cohen, J. (2025, September 8). *Africa's mpox epidemic no longer an international emergency, WHO says* . (Science) Retrieved September 23, 2025, from https://www.science.org/content/article/africa-s-mpox-epidemic-no-longer-international-emergency-who-says
- Ebrahim, S. H., Maslamani, M. A., Hosani, F. A., Abri, S. A., Alqahtani, M., Alahmad, B., . . . Memish, Z. (2025). Yemen's Malaria Crisis and its Implications for the GCC (Gulf Cooperation Council) Countries. *Journal of Epidemiology and Global Health*, *15*(111).
- Faro De Vigo. (2025, August 28). *Detectada una gaviota con gripe aviar en Bueu*. Retrieved September 23, 2025, from https://www.farodevigo.es/o-morrazo/2025/08/28/detectada-gaviota-gripe-aviar-bueu-121000612.html
- Front Page Africa. (2025, August 26). Liberia: Scientists at National Public Health Institute Discover New Monkeypox virus strain in Liberia as Mpox cases decline. (Front Page Africa) Retrieved September 23, 2025, from https://frontpageafricaonline.com/health/liberia-scientists-at-national-public-health-institute-discover-new-monkeypox-virus-strain-in-liberia-as-mpox-cases-decline/
- Geo News. (2025, September 15). *Two new polio cases raise Pakistan's 2025 tally to 26*. Retrieved from https://www.geo.tv/latest/623841-two-new-polio-cases-raise-pakistans-2025-tally-to-26





- Macau Daily Times. (2025, August 28). MACAU REPORTS THIRD IMPORTED MONKEYPOX CASE. (Macau Daily Times) Retrieved September 23, 2025, from https://macaudailytimes.com.mo/macau-reports-third-imported-monkeypox-case.html
- Pintado, I. (2025, September 8). *Alerta por un brote de gripe aviar H5N1 en una explotación de gallinas en Guadalajara*. (ConSalud) Retrieved September 23, 2025, from https://www.consalud.es/animalcare/salud-animal/alerta-por-un-brote-de-gripe-aviar-h5n1-en-una-explotacion-de-gallinas-en-guadalajara.html
- Saudi Food and Drug Authority . (2025, September 18). *SFDA Issues Warning Against Altarouti Chicken Frankfurt Due to Contamination with Staphylococcus Aureus Bacteria*. Retrieved September 23, 2025, from https://sfda.gov.sa/en/warnings/4607037
- Schnirring, L. (2025, September 9). *CDC says avian flu may infect the gut, though risk is low*. (CIDRAP) Retrieved September 23, 2025, from https://www.cidrap.umn.edu/avian-influenza-bird-flu/cdc-says-avian-flu-may-infect-gut-though-risk-low
- SINC Servicio de Información y Noticias Cientificas. (2025, September 16). *España registra este verano un repunte de brotes de gripe aviar: 35 casos en apenas dos meses*. Retrieved from https://www.agenciasinc.es/Noticias/Espana-registra-este-verano-un-repunte-de-brotes-de-gripe-aviar-35-casos-en-apenas-dos-meses
- The Peninsula. (2025, September 1). *Pakistan reports new polio case, totaling 24 so far in 2025*. Retrieved September 23, 2025, from https://thepeninsulaqatar.com/article/01/09/2025/pakistan-reports-new-polio-case-totaling-24-so-far-in-2025
- Tine, M. M. (2025, August 23). *URGENT: Un premier cas de Mpox, la variole du singe, confirmé à Dakar*. (SeneNews) Retrieved September 23, 2025, from https://www.senenews.com/actualites/urgent-un-premier-cas-dempox-la-variole-du-singe-confirme-a-dakar_556613.html
- Vallejos, M. (2025, August 25). BROTE DE INFLUENZA AVIAR: CHILE SUSPENDE IMPORTACIONES DESDE ARGENTINA. (Vilas Radio) Retrieved September 23, 2025, from https://vilasradio.cl/brote-de-influenza-aviar-chile-suspende-importaciones-desde-argentina/
- WHO. (2025, September 5). (WHO) Retrieved September 23, 2025, from https://www.who.int/news-room/speeches/item/who-director-general-s-opening-remarks-at-the-media-briefing---5-september-2025
- WHO. (2025, September 19). *Global Mpox Trends*. (WHO) Retrieved September 19, 2025, from https://worldhealthorg.shinyapps.io/mpx_global/
- WHO. (2025, August 28). *Multi-country outbreak of mpox, External situation report #57*. Retrieved September 23, 2025, from https://cdn.who.int/media/docs/default-source/documents/emergencies/multi-country-outbreak-of-mpox--external-situation-report--57.pdf?sfvrsn=420b121c_5&download=true