المركز الخليجي للوقاية من الأمراض ومكافحتها
Gulf Center for Disease Prevention and Control

مجلس الصحة
لدول مجلس التعاون
Gulf Health Council

Monthly Epidemic Intelligence Report

Issue 18

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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 CDC 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 **June 2025** (May 24 – June 23, 2025). *

52	1	2
Disease Signals	Mass Gathering Monitoring	Events of Regional Interest

Executive Summary

Disease Signals: This month, the epidemic intelligence team at Gulf CDC detected 52 infectious disease signals. Of these, 19% were dengue, 13.5% were cholera, and 11.5% were Crimean-Congo haemorrhagic fever (CCHF). 2% were environmental sample signals and 2% were animal disease signals.

No infectious disease signals were detected in GCC countries this month. There were 13 disease signals detected in the neighbouring countries of Iraq (2 CCHF signals), Yemen (2 cholera signals and one malaria signal), Lebanon (one unidentified animal disease signal), Syrian Arab Republic (one cholera signal), Pakistan (one CCHF signal, 2 poliovirus signals), and Sudan (3 cholera signals).

Mass Gathering Monitoring Event: The Gulf CDC monitored one mass gathering event: Hajj 1446 (2025).

- There were 24 signals identified from 12 countries for the Hajj-specific monitoring conducted by the Gulf CDC between 22 May and 18 June 2025.

Events of Regional Interest: The Gulf CDC continued monitoring 2 events of regional interest in June: 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 or 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.

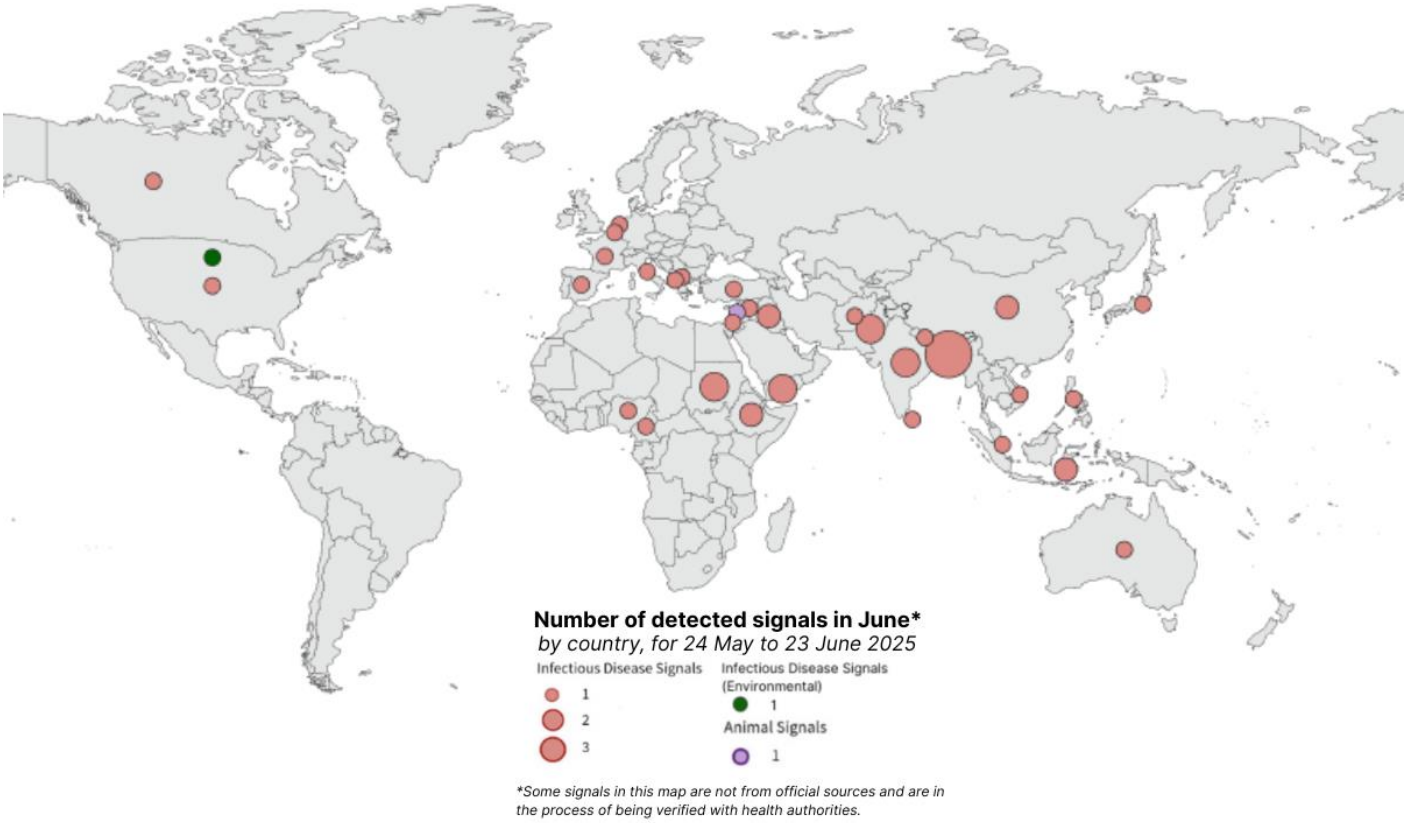

Figure 1: Number of detected signals and potential threats by the Gulf CDC from 24 May to 23 June 2025.

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 June 2025

- **Cholera in Yemen:** in April 2025, Yemen reported more than 1,300 new cases of cholera [1], the third highest monthly increase in the Eastern Mediterranean Region, according to the WHO Multi-country Outbreak of Cholera, External situation Report #26. From 1 January to 27 April 2025, nearly 13,000 cholera and/or acute watery diarrhea (AWD) cases have been reported in Yemen and 10 cholera-related deaths.
    - According to a 5 June media article [2], more than 6,000 cases of cholera were reported in the Ibb governorate in two weeks.

- **Malaria in Yemen:** According to a 5 June media article [2], more than 2,100 cases of malaria were reported in the Ibb governorate in two weeks.

- **Crimean-Congo haemorrhagic fever (CCHF) in Iraq:** Iraq has confirmed 53 cases and 7 deaths [3] in the current CCHF outbreak as of early May 2025. Cases have been recorded in the Kurdistan Region in Duhok, Erbil, and Koya, and the first case in Duhok has passed away.
    - Another media article published on 3 June 2025 [4] reported a 28-year-old man diagnosed with CCHF in Zakho. At the time of the article, the man has yet to be treated at a hospital.

- **Crimean-Congo haemorrhagic fever (CCHF) in Pakistan:** A media article [5] reported on 15 June 2025, a 24-year-old man from Hazro has passed away from CCHF in a Rawalpindi hospital. The man was first admitted to a hospital in Hazro on 12 June 2025, four days after symptom onset. Out of the six screenings this year for CCHF in Rawalpindi, the District Health Authority reported that two have come back positive, one of which have died, one negative, and four results are pending.

- **Influenza A(H10N3) virus in China:** According to the WHO [6], one new human infection of influenza A(H10N3) was reported in June 2025 in a 70-year-old female farmer. The woman first developed symptoms 2 April 2025 and presented at a hospital in Inner Mongolia four days later with severe pneumonia. As of 20 June 2025, the woman was in stable condition and still undergoing treatment.
    - To date, there have been six global cases of influenza A(H10N3) as of 20 June 2025.

- **Poliovirus (cVDPV2) in Ethiopia:** According to the Global Polio Eradication Initiative [7], four new cases of cVDPV2 have been reported from the regional state of Oromiya. The cases had onset dates between February and April 2025. As of 18 June 2025, 33 cases of cVDPV2 have been reported this year in the region, in comparison to 43 cases in 2024.

- **Poliovirus (WPV1) in Pakistan:** As of 21 June 2025, Pakistan has reported 12 cases of WPV1 this year [8]. Half of the cases come from the province of Khyber Pakhtunkhwa.
    - From 26 May 2025 to 1 June 2025, the country ran its third nationwide vaccination campaign [9], facilitating the immunization of 45 million people according to health officials.

- **Chikungunya in Sri Lanka:** According to a preprint research article [10], researchers have concluded that the chikungunya virus strains in the 2025 outbreak in Sri Lanka are similar to strains circulating across South Asia. The research team sequenced 22 samples acquired from people who presented at the hospital and had confirmed chikungunya cases.
    - The virus seems to have acquired previously uncharacterized unique mutations that affect replication efficiency, immune evasion, and transmission dynamics. While a mutation in the E2 envelope protein has been associated with transmission efficiency in *Aedes albopictus*, it was absent in all 2025 CHIKV viral sequences. However, these sequences carried E1 and E2 mutations, which results in enhanced viral fitness within the *Aedes aegypti* mosquito, suggesting urban transmission.

Mass Gathering Monitoring

Hajj Pilgrimage

Globally

Negligible	Very Low	Low	Moderate	High	Critical

Gulf CDC Risk Assessment of this Event – 29 May 2025

- **Risk Question**: What is the risk of infectious disease transmission occurring in the GCC in the next 3 months as a result of the 2025 Hajj pilgrimage based on the diseases with the highest chance of importation or exportation during/after Hajj?
- **Likelihood & Impact:** Very Low to Moderate, depending on the disease.
  - Moderate: COVID-19, Influenza, Measles
  - Low: Cholera, Crimean-Congo Haemorrhagic Fever (CCHF), dengue, Meningococcal disease, mpox
  - Very Low: MERS-CoV, Yellow Fever

Please refer to the Gulf CDC Rapid Risk Assessment: Mass Gathering Risk Assessment: Hajj 1446 (2025) from 29 May 2025 further details.

Why is this Notable?

Hajj is a mass gathering that has a high possibility of spreading infectious diseases and requiring public health monitoring. The risk of infectious disease transmission during Hajj may extend to the local population, other GCC countries, and the home population of returning pilgrims after Hajj. There are several public health risks increased in mass gatherings such as Hajj, including the risk of transmission of respiratory diseases, food and water-borne diseases, heat-related illnesses, and meningococcal diseases.

Key Stats

24 signals

Detected during Hajj Mass Gathering Monitoring from 12 countries

Key Factors of Concern for Hajj Mass Gathering Monitoring

Trends from previous mass gatherings

There have been some documented public health emergencies that previously occurred during the Hajj, most notably:

- **Meningococcal disease:** In 1987, serogroup A caused an outbreak, while serogroup W135 was responsible for outbreaks in 2000 and 2001
- **Cholera:** In 1821, an estimated 20,000 pilgrims died during the Hajj due to a cholera epidemic, which started in India in 1817 and spread across the world. Similarly, in 1865, an estimated 15,000 out of 90,000 pilgrims died due to the cholera epidemic that spread throughout the world.
- **Other public health hazards** have been documented in the past, such as heat-related illnesses, stampedes, and suffocation. In Hajj season 1997/1417, a fire occurred in Mina tents, which led to the death of 343 people and the injury of more than 1,500 people because of a gas cylinder explosion.

Situational Highlights for Hajj Mass Gathering Monitoring

- The Hajj mass gathering monitoring took place between 22 May and 18 June 2025.
- **Priority countries:** For the Hajj, the Gulf CDC focused on mass gathering monitoring of 10 priority countries. These 10 countries were based on the highest number of Hajj permits granted to nationals of Indonesia, India, Bangladesh, Pakistan, Iran, Turkey, Iraq, Nigeria, Egypt and Algeria.
- **Priority hazards:** The Gulf CDC focused on three potential hazard categories to monitor during the Hajj pilgrimage.
    - Infectious diseases with a risk of immediate transmission (i.e. COVID-19, measles, etc.)
    - Infectious diseases that can have high consequences but are typically reported sporadically (i.e. MERS, mpox, anthrax, meningococcal disease, avian influenza, Crimean-Congo hemorrhagic fever, Ebola, botulism, Kyasanur forest disease, Marburg virus disease)
    - Infectious diseases that do not present as an immediate transmission risk during the Hajj but have a risk of long-term establishment in Saudi Arabia due to the presence of a competent vector (i.e., Chikungunya, malaria, yellow fever, Zika, dengue), as well as the potential of introducing or importing a new vector to the Hajj region.
- **Signals:** A total of 24 signals from 12 countries were identified in Hajj Mass Gathering Monitoring
    - 13 signals were detected in 6 of the 10 priority countries (Bangladesh, India, Indonesia, Iraq, Pakistan and Turkey)
- **Priority hazards identified:**
    - Dengue – 8 signals
    - CCHF – 3 signals
    - Cholera – 7 signals
    - Malaria – 1 signal
- The Gulf CDC is continuing to monitor priority hazards following the Hajj given incubation periods of priority hazards, delays in event-based and indicator-based reporting, and continued travel in the GCC countries, particularly within Saudi Arabia, by pilgrims following completion of the Hajj pilgrimage.

Events of Regional Interest

Highly 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 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 Gulf CDC Rapid Risk Assessment: Highly Pathogenic Avian Influenza H5N1 from 6 August 2024 further details.

Why is this Notable?

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

Key Stats

18 confirmed cases
of HPAI H5N1 in humans globally in 2025

Key Factors of Concern for Avian Influenza H5N1

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 person-to-person transmission.
Trends from previous outbreaks	In 2023, there were 12 reported human cases of H5N1 across 4 countries (Cambodia, China, Chile, the United Kingdom). In years prior, there have been small numbers of sporadic reported human infection cases of H5N1 across several countries. In 2024, the HPAI H5N1 outbreak in cattle in the United States caused human infection cases of H5N1 to significantly increase. Additionally, multiple countries reported human infection cases.

Healthcare capacity	All GCC countries have set up infectious disease programs or services for zoonosis, 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 H5N1 as 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 United States 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-to-human transmission makes the importation through humans unlikely.

Situational Highlights for Avian Influenza H5N1

- **Epidemiological situation in humans:**
  - In 2025, there have been 18 confirmed cases of HPAI H5N1 in humans. In 2024, there were 80 confirmed cases of HPAI H5N1.

Global HPAI H5N1 confirmed cases in humans in 2025 (as of 23 June 2025)

Country	Cases	Deaths	Clade(s)	Exposure(s)
United States	5	0	2.3.4.4b	Dairy cattle, backyard poultry, unknown,
Cambodia	6	5	2.3.2.1e	Backyard poultry, suspected infected birds
Bangladesh	2	0	2.3.2.1a	Under investigation
United Kingdom	1	0	2.3.4.4b	Farm birds
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

  - **Bangladesh:** 2 human cases of HPAI H5N1 [11] were confirmed in May 2025.
    - A sample collected from a child in Khulna Division in April 2025 who recovered from illness was laboratory-confirmed for the H5 clade 2.3.2.1a influenza A(H5N1) virus.
    - A second human infection with an H5 clade 2.3.2.1a influenza A(H5N1) virus was retrospectively detected in a sample collected from another child also in Khulna Division in February 2025.
    - As per IHR regulations, the WHO was notified of both cases on 5 May and 27 May 2025 respectively.
    - Phylogenetic analysis shows that the viruses cluster with other recent human cases detected in India and Australia, indicating regional spread of related strains.
  - **China:** On 10 May, China notified the WHO of one confirmed case [12] of human infection with HPAI H5N1 in a woman traveling from Vietnam.
    - The case was detected through routine screening [11] at the port of entry in China. The case was admitted to the hospital in China on 7 April and had recovered at the time of the notification.
  - **Cambodia:** Cambodia has confirmed 3 new cases of HPAI H5N1.
    - On 28 May, an 11-year-old boy in Cambodia died from HPAI H5N1 [13], marking the fourth fatality attributed to the virus in the country this year.

- Laboratory results from the Pasteur Institute of Cambodia showed the patient was positive for the H5N1 virus.
- According to reports, poultry near the patient's house had gotten sick and died a week before the boy fell ill.

- On 14 June, the Ministry of Health of Cambodia announced a case [14] from 12 May, involving a 65-year-old woman from Takeo province.
  - It is the first non-fatal case in Cambodia in 2025.
  - The patient did not have contact with sick or dying poultry, and none were reported in her village.
- On 16 June, a 52-year-old adult from Svay Rieng province died from HPAI H5N1, marking the country's sixth case and fifth H5N1 death in 2025. [15]
  - Laboratory testing by the National Institute of Public Health confirmed H5N1 positivity on 20 June.
  - Investigations revealed the individual had handled sick and dead chickens two days before symptom onset.

- **Epidemiological situation in animals:**
  - **Brazil:** On 17 June, the Brazilian Ministry of Agriculture officially declared Brazil free of HPAI H5N1 [16] in commercial poultry flocks, following a 28-day period without any new commercial farm outbreaks.
    - Brazil's countdown to regain disease-free status started on 22 May, following the successful disinfection of the affected farm in Rio Grande do Sul.
    - This declaration highlights the effective containment of the outbreak and reaffirms the country's HPAI H5N1-free status in commercial poultry.
  - **Canada:** In December 2024, HPAI H5N1 was confirmed at the Universal Ostrich Farm in Central Kootenay, British Columbia. On 16 June, the Canadian Food Inspection Agency (CFIA) reported serious non-compliance with the Health of Animals Act. [17]
    - The farm failed to report the cases of illness and deaths to the CFIA and failed to adhere to quarantine orders.
    - The farm also failed to undertake appropriate biosecurity risk mitigation measures such as preventing wild bird access to ostriches, controlling water flow from the quarantine area, and improving fencing. Thus, these actions increased the risk of transmission of HPAI H5N1.
  - **China:** On 29 May, China has broadened its ban on Brazilian poultry [18] following the confirmation of a HPAI H5N1 case at a commercial farm in Rio Grande do Sul, Brazil.
    - The restriction, initially limited to chicken meat, has been expanded to cover all chicken-derived products from across Brazil.
    - According to Brazil's Ministry of Agriculture, the decision demonstrates China's commitment to proactive risk mitigation in response to HPAI H5N1 threats.
  - **India:** Authorities in Gorakhpur, Uttar Pradesh state, have confirmed outbreaks of avian influenza caused by both H5N1 and H9N2 subtypes at five locations [19]: Jhungia Bazar, Aluminium Factory area, Taramandal, Bhagat Chauraha, and Shaheed Ashfaqullah Khan Zoological Park.
    - In response, officials have closed all live bird markets for 21 days and launched culling operations within a 1 km radius around the affected sites.
    - Over 1,300 samples have been collected and tested, with rapid response teams overseeing containment and disinfection in accordance with India's national avian influenza guidelines.
  - **Philippines:** Boehringer Ingelheim Philippines, a subsidiary of the German multinational pharmaceutical company, has announced its readiness to supply a bird flu vaccine [20] to the Philippine poultry industry.
    - The vaccine is pending regulatory approval from the Philippine Food and Drug Administration.
  - **United States:** A new case of HPAI H5N1 has been confirmed in a live bird market in Essex County, New Jersey [21], marking the sixth detection in the state in 2025.
    - Authorities have initiated immediate containment measures, including culling of affected birds, assessing market works for possible exposure and disinfecting the facility.
    - The market has been temporarily closed and will remain closed until quarantine protocols are lifted.
  - A study by the University of Maryland found that HPAI H5N1 has infected 607 felids [22], including domestic cats and tigers, across 18 countries, with 302 deaths reported, between 2004 and 2024.
    - Researchers report that the virus has evolved to allow transmission from birds to felines, raising concerns about the potential for human spillover.

- Symptoms like encephalitis in cats may be misdiagnosed as rabies, and many cases are only detected post-mortem, suggesting underreporting.

- **Recent findings:**
  - A genomic analysis of the emerging H5N1 D.1.1 genotype [23] reveals it is a reassortment of genes in both Eurasian and North American lineages, capable of infecting wild birds, poultry, and humans.
    - The findings highlight ongoing viral evolution and the need for sustained genomic surveillance to manage zoonotic and pandemic risks.
  - A new mRNA-based vaccine for cattle [24] has demonstrated strong immune responses in trials, offering protection against H5N1 transmission via infected milk.
    - In a study involving 10 calves, vaccinated animals showed significantly lower viral RNA levels than controls indicating a key step in livestock-targeted flu prevention.
  - A recent study evaluating the polymerase inhibitor, baloxavir marboxil (BXM) against bovine H5N1 in mice [25] found that early post-infection treatment was effective in reducing viral impact.
    - However, delayed administration led to reduced efficacy and a higher risk of resistance, emphasizing the need for prompt administration for successful outcomes

Mpox

Globally

Negligible	Very Low	Low	Moderate	High	Critical

Gulf CDC Risk Assessment of this Event – 14 August 2024

- **Risk Question:** What is the likelihood of importing a mpox clade Ib 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.

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. Furthermore, on 14-Aug-2024, the 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
**No mpox cases in GCC countries in the last 6 weeks*

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 is 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 dynamics involved. Initially, infections happened within minor domestic or local clusters, believed to be predominantly caused by the transmission from animals to humans, as 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 were clade II, lineage B.1, and its descendants, while the current outbreaks in several countries in Africa (DRC, Uganda, Kenya, Rwanda, Burundi) are primarily clade I.

Healthcare capacity

Within the DRC where cases of mpox clade I are highest, testing in rural areas is limited and just 24% of the clinically compatible (reported as suspected) cases in the country have been tested in 2024. Of those tested, the positivity is approximately 65% at the national level. Surveillance and response capacity have been strengthened 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, 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 passenger volumes between the 5 African countries reporting the highest cases of mpox clade I in 2025 to the Gulf region from June 2024 [26]:

	DRC	Uganda	Burundi	Nigeria	Sierra Leone
UAE	1,859	13,248	406	4,453	257
Bahrain	36	79	2	82	1
Saudi Arabia	332	1,871	64	12,675	97
Oman	88	134	57	367	25
Qatar	170	1,186	16	2,248	39
Kuwait	71	164	5	167	17

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.

Situational Highlights for Mpox

- **WHO Public Health Emergency of International Concern (PHEIC) status:** following the fourth meeting of the International Health Regulations (IHR) Emergency Committee [27] regarding the
- upsurge of mpox held on 5 June, the WHO Director-General announced that the mpox upsurge continues to meet the criteria of a PHEIC.
    - Following the advice of the committee, the WHO Director-General issued a revised set of temporary recommendations including extending most of the existing recommendations around emergency coordination, collaborative surveillance, safe and scalable care, international traffic, vaccination, community protection and addressing research gaps.
    - A new recommendation addressing governance and financing was added, focusing on optimizing the use of resources by allocating available resources to the implementation of core mpox response interventions needed in the medium term.

- **New and suspected cases of mpox clade I outside Africa:** Australia, Albania, North Macedonia China and the United States reported new cases of mpox.
    - **Australia:** On 15 May 2025, Australia confirmed the first imported case of mpox clade Ib [28] in the country.
        - While limited details were released about the affected individual, they were identified as an adult male with recent travel to Thailand.
        - Health authorities state that the risk of community transmission [29] from this case is low and the situation continues to be monitored.
        - Health authorities encourage vaccination for those who are at high risk of exposure or have upcoming travel to regions with active transmission.
    - **Albania:** Albania has confirmed its first mpox case [30] in a man who recently returned from unspecified travel abroad. The case raises the risk of hidden local spread, given Albania's lack of prior experience with mpox.
        - Based on the patient's travel history and absence of known local transmission, exposure is suspected to have occurred abroad.
        - Public health authorities have not yet confirmed [31] any additional cases or clusters. Contact tracing and further investigation is underway, and the specific clade of the virus has not yet been identified.
        - There are no details on the isolation measures or treatments administered, but the patient is reported to be under care and is expected to recover.

- **North Macedonia**: On 23 May 2025, the Institute of Public Health (IPH) announced the first-ever laboratory confirmed cases of mpox [32] in the country.
  - The confirmation followed two individuals who presented with symptoms suggestive of mpox on 22 May and were referred to the Clinic for Skin Diseases where diagnostic tests were performed.
  - Both individuals are from the capital Skopje and stated that they had not travelled abroad. The IPH director confirmed the cases were not connected.
  - Public health measures [33] were initiated included epidemiological investigations and contact tracing.
- **China**: According to WHO's Global Mpox Trends dashboard [28], on 17 June 2025 China confirmed a new mpox clade Ib case involving an adult male traveller coming from Mali and the Republic of Congo.
- **United States**: The Massachusetts Department of Public Health (MDPH) [34] announced on 17 June 2025 the first case of mpox clade I confirmed in the state; this is the fifth case identified in the US.
  - All five cases reported to date had recent travel to areas with sustained clade I mpox transmission. The risk of clade I mpox to the public in the United States and in Massachusetts remains low.

- **Cases in Africa:** According to the Africa CDC [35] as of 15 June, there were a total of 68,459 suspected cases, of which 20,628 have been laboratory confirmed, and 610 deaths (in suspected cases) in 22 African countries in 2025.

Cumulative number of confirmed mpox cases and death by African country reporting, 2025

Country	Confirmed cases*	Deaths among confirmed cases
Angola	4	0
Burundi	1,031	0
Central African Republic	8	0
Congo	45	1
Côte d'Ivoire	23	0
DR Congo	9,539	88
Ethiopia	18	1
Ghana	85	0
Guinea	1	0
Kenya	119	1
Liberia	112	0
Malawi	27	0
Morocco	2	0
Nigeria	179	3
Rwanda	38	0
Sierra Leone	3,842	20
South Africa	6	0
South Sudan	15	0
Tanzania	59	0
Togo	15	0
Uganda	5,377	37
Zambia	83	3
TOTAL	20,628	154

*Africa CDC defines confirmed cases as laboratory confirmed.

- **Ethiopia:** On 25 May, the Ethiopian Ministry of Health and Ethiopian Public Health Institute confirmed the country's first mpox case [36]. This marks the first time the virus has officially been reported in the country.
  - The laboratory-confirmed case is a 21-day-old baby boy. Additional testing has confirmed the baby's mother was exposed to the virus. The baby's father is reported to have recent travel history to a neighbouring country (it has not been described if this an mpox affected neighbouring country).
  - Both mother and baby received medical care in an isolation ward at a health facility and are in good condition.
  - The patients are from Moyale City in the south of the Ethiopian Oromiya region. The city serves as a major trade and transportation hub.
  - Information including a timeline of events, symptoms experienced, virus clade, and the father's recent country of travel have not been described. The source of infection [37] continues to be investigated.

- **Ghana:** Mpox cases have been rising in Ghana. Ghana Health Service (GHS) has committed to updating mpox cases every Tuesday.
  - The most recent update on 18 June 2025 confirmed 107 total cases [38], a significant rise in less than a month (an update on 26 May previously confirmed 19 cases).
  - In response to this uptick in cases, contact tracing efforts [39] have been ramped up to contain its spread.
  - GHS is encouraging the public to take preventative measures, including practicing good hygiene, avoiding close contact with individuals showing symptoms, and seeking medical attention promptly if symptoms arise.

- **Recent findings:**
  - A recently concluded study examined the long-term effects of mpox virus (MPXV) infection and the MVA-BN vaccination [40]. The study included individuals diagnosed with mpox and those vaccinated with MVA-BN, with follow-up visits at specific intervals. The goal of the study was to understand the lasting impact of mpox and the effectiveness of the MVA vaccine in providing long-term protection.
    - It found that MPXV infection can leave persistent scars for up to two years, but the virus becomes undetectable after eight months.
    - Immunologically, MPXV infection triggers a stronger and longer-lasting antibody response than MVA-BN vaccination, especially in individuals without prior smallpox vaccination.
    - Findings suggest current vaccination strategies may need improvement to ensure better protection in at-risk populations.
  - A study published in the New England Journal of Medicine [41] on 18 June 2025 found three cases of vertical transmission of the mpox clade Ib virus.
    - The first case involved a woman at 6 weeks' gestation who presented mpox symptoms and subsequently tested positive for clade Ib MPXV. Despite supportive therapy, she had a spontaneous abortion. MPXV DNA was detected in placental and embryonic tissue.
    - The second case involved a woman with human immunodeficiency virus (HIV) infection who presented at 16 weeks' gestation with mpox symptoms. 15 days after she tested positive for clade Ib MPXV, fetal movements ceased, and ultrasonography confirmed intrauterine fetal death. A cesarean delivery was performed after unsuccessful induction of labor. The fetus had several mpox-like lesions on the face, chest, abdomen, and upper limbs. MPXV DNA was detected in placental and fetal tissues.
    - The third case involved an HIV-positive woman at 34 weeks' gestation who presented with mpox symptoms and tested positive for clade Ib MPXV. She was admitted to the hospital with hypotension but recovered and was discharged after 29 days. Thirteen days later, at 40 weeks' gestation, she delivered a live infant who had multiple ulcerative skin lesions. MPXV DNA was detected in a placental swab and in an oropharyngeal swab obtained from the newborn. Three months later, the mother reported the infant's death, which was considered by the team of clinicians to have been probably unrelated to mpox.

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