



News:

- **Disinformation:** In the aftermath of the suspected German Marburg Virus cases, which have been tested negative, Russian newspapers reported on : “[The deadly Marburg virus has come to Ukraine – the infection was brought by a Ukrainian soldier who studied in Poland](#)”. **This is clearly a disinformation.** Information like this should be checked cautionary and verified at least twice before distributing it.
- **ECDC:** released a “[Factsheet for health professionals about Marburg virus disease](#)”. It is important to notice that the information contained in the factsheet is intended for the purpose of general information and should not substitute individual expert advice or the judgement of healthcare professionals. **ECDC:** launched a “[Call for application for ECDC Fellowship Programme EPIET and EUPHEM paths, EU-track, Cohort 2025](#)”. Candidates are invited to apply for a post as a fellow in the ECDC Fellowship Programme, the Intervention Epidemiology path (EPIET) and/or Public Health Microbiology path (EUPHEM), EU-track, which is managed by the ECDC.
- **ECDC:** has released a [new report addressing the risk factors associated with higher odds of carrying the parasite responsible for Chagas disease](#), in non-endemic regions such as Europe. ECDC emphasises that understanding these risk factors is crucial for identifying individuals who may be carrying the parasite. This knowledge is vital for timely detection and treatment, which can prevent further transmission of *T. cruzi*, particularly through SoHo.
- **WHO:** approves [first mpox diagnostic test for emergency use](#), boosting global access. The “Alinity m MPXV assay” is a real-time PCR test that enables detection of monkeypox virus (clade I/II) DNA from human skin lesion swabs. It is specifically designed for use by trained clinical laboratory personnel who are proficient in PCR techniques and IVD procedures. By detecting DNA from pustular or vesicular rash samples, laboratory and health workers can confirm suspected mpox cases efficiently and effectively.
- **WHO/UNICEF/UNRWA:** The [second round of an emergency polio vaccination campaign](#) was scheduled to start on 14 October 2024 in Gaza, to vaccinate an estimated 591 700 children under ten years of age with a second dose of the novel oral polio vaccine type 2 (nOPV2) vaccine.
- **WHO:** has [verified 23 attacks on health care in Lebanon that have led to 72 deaths and 43 injuries among health workers](#) and patients. Fifteen incidents impacted health facilities, while 13 impacted health transport. Hospitals in Lebanon are already under massive strain as they strive to sustain essential health services while dealing with an unprecedented influx of injured people. Understaffed and under-resourced, the health system has been struggling to maintain uninterrupted services to all those in need with supplies being depleted and health workers exhausted.
- **WHO:** announced in a [new report that vaccines against 24 pathogens could reduce the number of antibiotics needed by 22%](#) or 2.5 billion defined daily doses globally every year, supporting worldwide efforts to address antimicrobial resistance (AMR). While some of these vaccines are already available but underused, others would need to be developed and brought to the market as soon as possible. *Streptococcus pneumoniae* could save 33 million, typhoid could save 45 million, malaria caused by *Plasmodium falciparum* could save up to 25 million and TB could have the highest impact once they are developed, saving between 1.2 to 1.9 billion antibiotic doses.

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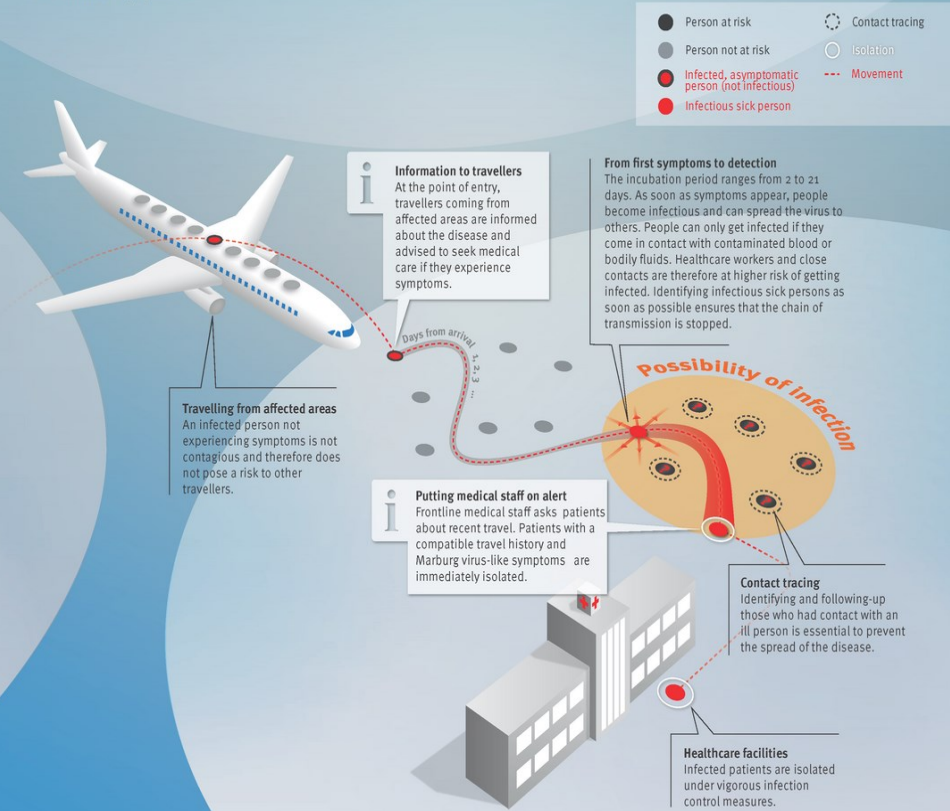
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## Marburg Virus: reducing the risk of transmission

A Marburg virus outbreak has been reported in Rwanda in September 2024. The risk of importation to European countries is low. To minimise this risk, public health efforts in the EU should focus on early case detection and isolation. Marburg virus is transmitted only by direct contact with bodily fluids of an infected person or animal, or by indirect contact with contaminated surfaces and materials like clothing, bedding and medical equipment.



# Force Health Protection Hybrid Event 2024

## Force Health Protection Hybrid Event 2024

**Topic:** One Health

**Date:** 05 - 07 Nov 2024

**Venue:** NATO Conference Room, Dachauer Str. 128, 80637 Munich, GERMANY

One Health is an approach that recognises that the health of people is closely connected to the health of animals and our shared environment. One Health is not new, but it has become more important in recent years as multiple factors continue to influence the interactions between people, animals, plants, and our environment.

The [hybrid FHP Event in 2024](#) will **primarily focus** on 'One Health' and we invited individuals or groups to submit an abstract describing their work or experience in this field.

We also [asked for presentation](#) on **wider Force Health Protection**.

The result is, we received a total of 29 abstracts from 11 different nations, covering One Health, Infectious Diseases, Health Surveillance, FHP Capabilities, Occupational Health, CBRN and Laboratory Capabilities.

The slots for presentations are already fully booked, but there are still free places to attend the FHP Hybrid Event online or in person in Munich.

We are very happy to welcome more participants and hope for a lively exchange of expertise during these days.

### Registration

Please complete the registration to join the event in person [here](#) or virtual [here](#).

Both registration possibilities can be found at NATO MILMED COE webpage <https://coemed.org/news-and-events>; too.

### Administration Information

#### FHP Hybrid Event fee

- The conference fee for “in person” participation is **85 EUR** (online payment during the registration process).
- Online participation is for **free**.

#### Hosted meals

- Lunch and refreshments are **included**.

#### Non hosted dinner

- A **non-hosted dinner** is planned for Wednesday November 6. The venue will be announced during the meeting.



# Marburg Virus Outbreak in Rwanda

Source: [WHO](#), [WHO2](#), [NewsMedia](#), [CIDRAP](#), [ECDC](#), [BlueDot](#)

**The Republic of Rwanda has confirmed several cases of Marburg virus disease (Marburg) in hospitals around the country, including some deaths. This is the country's first Marburg virus outbreak.**

On 27 September 2024, the Rwanda Ministry of Health announced the confirmation of Marburg virus disease (MVD). Blood samples taken from people showing symptoms were tested by real-time reverse transcription polymerase chain reaction (RT-PCR) at the National Reference Laboratory of the Rwanda Biomedical Center and were positive for Marburg virus.

Since September 27 to October 15, 62 cases of Marburg virus have been confirmed, 15 people have died, and 27 individuals are under treatment.

The Ministry of Health's data indicated that six more people recovered from the virus on Monday, bringing the total to 26 - as 20 had recovered as of Sunday, October 13.

To be considered recovered, patients must test negative twice, with tests spaced 72 hours apart. No new cases or deaths were recorded. The cases are reported from seven of the 30 districts in the country namely: Gasabo, Gatsibo, Kamonyi, Kicukiro, Nyagatare, Nyarugenge and Rubavu districts. Healthcare workers from two health facilities in Kigali account for over 70% of confirmed cases.

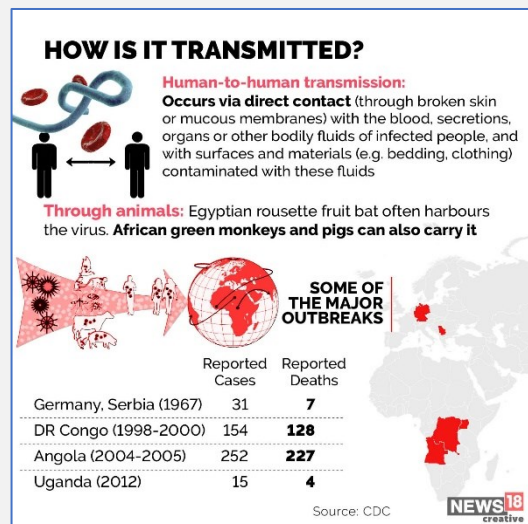
On Sunday the ministry indicated that since the announcement of the first-ever virus outbreak in Rwanda, on September 27, all new confirmed cases have been within the hospital cluster in Kigali and their contacts, and all were under isolation and treatment. **There is no evidence of community transmission.**

## Vaccination efforts

On Saturday, October 12, 1,000 more [Marburg virus vaccines](#) from the Sabin Vaccine Institute arrived in Rwanda, following an initial shipment of 700 doses. The vaccines are **primarily aimed at healthcare workers and those in high-risk settings**, particularly those working in intensive care units (ICUs) who face greater exposure. More than about 700 people had received the vaccine by Sunday.

According to scientific results, Sabin's single-dose investigational Marburg vaccine was found to be promising in Phase 1 clinical and non-clinical studies, with results showing it to be safe, while eliciting rapid and robust immune responses among volunteered healthy individuals in Kenya and Uganda in 2023.

In addition, the ministry expects to receive about 5,000 doses of remdesivir to provide advanced treatment for patients with MVD.



## WHO Risk Assessment

Marburg virus disease (MVD) is caused by the same family of viruses (*Filoviridae*) that causes Ebola disease. MVD is an epidemic-prone disease associated with high CFR (24-88%). In the early course of the disease clinical diagnosis of MVD is challenging to distinguish from other infectious diseases such as malaria, typhoid fever, shigellosis, meningitis and other viral haemorrhagic fevers. Epidemiologic features can help differentiate between viral hemorrhagic fevers (including history of exposure to bats, caves, or mining) and laboratory testing is important to confirm the diagnosis.

The notification of 56 confirmed cases, of which over 70% are healthcare workers from two different health facilities in the country is of great concern. Healthcare-associated infections (also known as nosocomial infections) of this disease can lead to further spread if not controlled early. The importance of screening all persons entering health facilities as well as inpatient surveillance for prompt identification, isolation, and notification cannot be overemphasized. This is in addition to the importance of contact identification and monitoring of all probable and confirmed cases. The source of the outbreak, geographical extent, the likely date of onset, and additional epidemiological information on cases are still pending further outbreak investigation.

There is a **risk of this outbreak spreading to neighbouring countries** since cases have been reported in districts located at the borders with the Democratic Republic of the Congo, the United Republic of Tanzania, and Uganda. Further **risk of international spread is also high** as confirmed cases have been reported in the capital city with an international airport and road networks to several cities in East Africa.

Optimized supportive care for patients, which includes careful monitoring, intravenous fluid, and early treatment of complications, can improve patient survival. There are promising vaccines and therapeutic candidates for MVD, but these must be proven in clinical trials. WHO has provided guidance to the Ministry of Health on how to manage cases.

**WHO assesses the risk of this outbreak as very high at the national level, high at the regional level, and low at the global level.** Investigations are ongoing to determine the full extent of the outbreak, and this risk assessment will be updated as more information is received.



# Vaccination update on Mpox

## Mpox Vaccination Roadmap– African Countries

The number of mpox cases has increased sharply in the WHO African Region in recent years. This upsurge has been fuelled in large part by increases in the Democratic Republic of the Congo (DRC). In 2023, a new variant of clade I MPXV was identified in the DRC's South Kivu province, named clade Ib, demonstrating evidence of adaptation to humans due to sustained human-human transmission. In recent months, clade Ib mpox has spread to neighbouring countries, including Burundi, Central African Republic, Republic of the Congo, Kenya, Rwanda, and Uganda. In response, the WHO declared the outbreak a Public Health Emergency of International Concern (PHEIC).

The Mpox Vaccination Preparation Roadmap is developed to support countries in planning mpox vaccine introduction and implementation. The Roadmap contains a series of recommended actions for countries to ensure mpox vaccines can be used safely, effectively, and efficiently once they are accessed. It can be used both by countries with active mpox outbreaks preparing to use mpox vaccines as components of their emergency response and by countries not currently experiencing an outbreak but looking to ensure vaccine preparedness for a possible future one.

## DRC vaccination campaign

The DRC has reported over 30,000 suspected and confirmed cases and 990 deaths since the start of 2024, linked to the more virulent clade I of the monkeypox virus, accounting for 90% of mpox cases in the African region. This is a historical trend - in all of 2023, the DRC reported 12,000 mpox cases. The DRC has launched a **mpox vaccination campaign** on 5-Oct-2024, focusing on outbreak control. The vaccination started in North Kivu province, **prioritizing health workers, frontline responders, contacts of confirmed cases, and other at-risk groups** (because of limitation in available doses), and expanded across 11 highly affected health zones in provinces including Equateur, North Kivu, Sankuru, South Kivu, Sud-Ubangi, and Tshopo.

DRC has received 265,000 doses of the modified vaccinia Ankara-Bavarian Nodic (MVA-BN) vaccine, donated by the European Commission, Gavi, and the U.S. government. The MVA-BN mpox vaccine will be used to vaccinate adults. To be fully protected, two shots each a month apart are required. The DRC is expecting a delivery of 3 million doses of the LC-16 vaccine which has the potential to protect children against mpox. The LC-16 vaccine requires only one shot to provide protection.

**Mpox vaccines are limited**, especially in Africa, but the MVA-BN vaccine was added to WHO's pre-qualification list in September 2024, aiming to improve access.

WHO is working with partners to establish a distribution mechanism for donated doses and direct procurements.

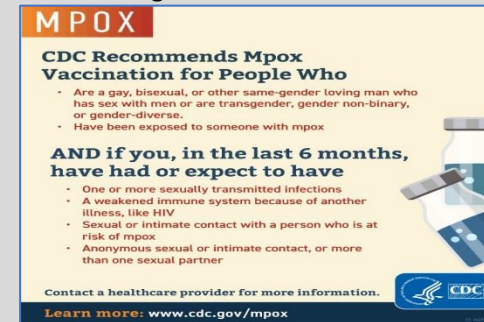
Source: [WHO-Africa](#), [WHO-Africa Roadmap](#), [UNICEF](#), [AfricaCDC](#)

## **Statement of the WHO Global Advisory Committee on Vaccine Safety (GACVS) on the safety of the mpox vaccines for use in high-risk groups;**

On 20 September 2024, the WHO [GACVS](#) was updated on safety data from passive and active surveillance from the European EMA, US CDC, and Japanese PMDA on the two 3rd generation vaccines (modified/non-replicating vaccinia virus (MVA)-BN(Jynneos/Imvanex/Imvamune; Bavarian Nordic) and minimally replicating LC16m8 vaccine (KM-Biologics)). The GACVS was updated on post-approval safety data of MBA-BN vaccines and the safety findings from clinical studies on LC16m8 vaccine. While current post-approval data indicate that these vaccines have favorable safety profiles in adults that are generally consistent with pre-licensure clinical trial data, close monitoring is recommended to detect any potential safety signal.

The Committee emphasizes the importance of monitoring the safety of both mpox vaccines MVA-BN and LC16m8, in all target populations where they are used including its off-label use. It is important to note that while MVA-BN can be used in immunocompromised individuals and pregnant women, LC16m8 is not recommended for use in these populations. Special attention should also be given to infants, children, and lactating women.

Source: [WHO](#)



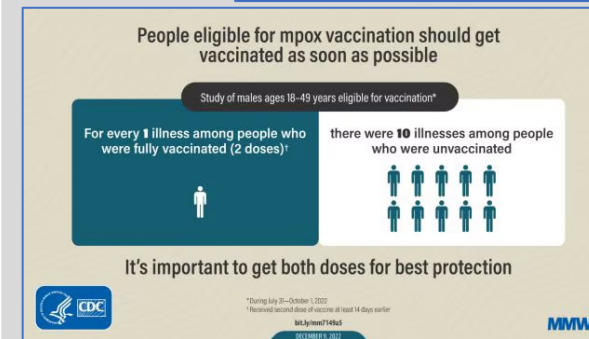
**MPOX**  
**CDC Recommends Mpox Vaccination for People Who**

- Are a gay, bisexual, or other same-gender loving man who has sex with men or are transgender, gender non-binary, or gender-diverse.
- Have been exposed to someone with mpox

**AND if you, in the last 6 months, have had or expect to have**

- One or more sexually transmitted infections
- A weakened immune system because of another illness, like HIV
- Sexual or intimate contact with a person who is at risk of mpox
- Anonymous sexual or intimate contact, or more than one sexual partner

Contact a healthcare provider for more information.  
 Learn more: [www.cdc.gov/mpox](http://www.cdc.gov/mpox)



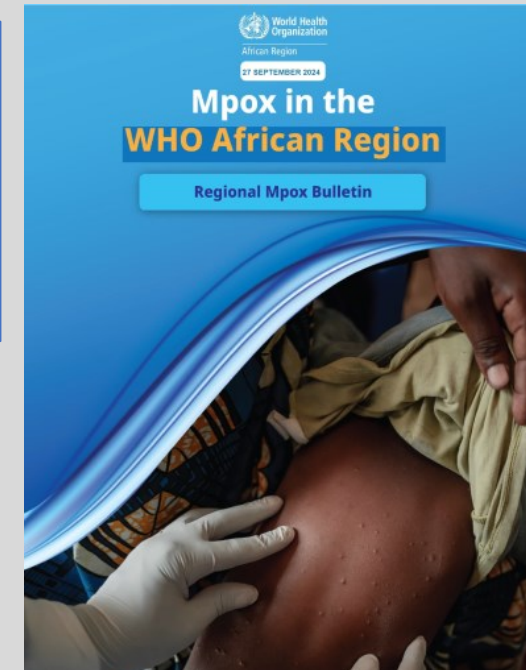
People eligible for mpox vaccination should get vaccinated as soon as possible

Study of males ages 18-49 years eligible for vaccination\*

For every 1 illness among people who were fully vaccinated (2 doses)†	there were 10 illnesses among people who were unvaccinated
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It's important to get both doses for best protection

\*During July 20–October 1, 2023. †Received second dose of vaccine at least 14 days earlier. See [www.cdc.gov/mpox](#) for more information.



World Health Organization  
 African Region  
 27 SEPTEMBER 2024

**Mpx in the WHO African Region**

Regional Mpox Bulletin

# What are early seasonal ILI trends in the northern hemisphere and updates on global COVID-19 activity?



Few countries are starting to observe increases in seasonal respiratory illnesses in the northern hemisphere, though there is variability in timing compared to last year.

COVID-19 activity is high or increasing in many European countries, with the recombinant XEC variant predicted to become dominant in the region by mid-October.

## Seasonal Influenza

Among 68 countries in the northern hemisphere reporting seasonal influenza data, there were 36 that had adequate data. Of the 36 countries, 7 observed early signs of epidemic growth, as of epiweek 39 (28-Sept-2024):

Country	Week since R. has been greater than 1		Comparison to last year
	2024	2023	
UK, Northern Ireland	Epiweek 38	Epiweek 26	↓ Later by 12 weeks
UK, England	Epiweek 28	Epiweek 30	↑ Earlier by 2 weeks
France	Epiweek 39	Epiweek 38	↓ Later by 1 week
Denmark	Epiweek 32	Epiweek 26	↓ Later by 6 weeks
Canada	Epiweek 33	Epiweek 31	↓ Later by 2 weeks
UK, Scotland	Epiweek 34	Epiweek 26	↓ Later by 8 weeks

Country	Week since R. has been greater than 1		Comparison to last year
	2024	2023	
UK, Northern Ireland	Epiweek 33	Epiweek 37	↑ Earlier by 4 weeks
Norway	Epiweek 32	Epiweek 34	↑ Earlier by 2 weeks
UK, England	Epiweek 28	Epiweek 29	↑ Earlier by 1 week
Ireland	Epiweek 39	Epiweek 42	↑ Earlier by 3 weeks
Poland	Epiweek 31	Epiweek 43	↑ Earlier by 11 weeks
Spain	Epiweek 33	Epiweek 35	↓ Later by 2 weeks
UK, Scotland	Epiweek 38	Epiweek 32	↑ Earlier by 6 weeks

Data source: BlueDot's Human Influenza Cases - Global API. Source data provided by World Health Organization. Global Influenza Programme. FluNet.

## Respiratory Syncytial Virus (RSV)

Among 68 countries in the northern hemisphere reporting RSV data, there were 21 that had adequate data. Of the 21 countries, 6 showed early signs of epidemic growth, as of epiweek 39 (28-Sept-2024):

## Global COVID-19 Update

Countries were only included if they consistently reported weekly case data to the WHO since July 2024 with less than two weeks of missing data, 54 countries are included. Among countries with sufficient data, about half (26/54) are **observing a growth rate ratio (GRR) higher than 1.0** in the most recent four weeks, indicating an increase in their COVID-19 case rate compared to the previous four weeks.

Notably, 25 countries have reported the highest level of case rates observed throughout this calendar year (above 80th percentile) at some point in the most recent four weeks, among 54 countries.

Several countries in the European region are observing high or increasing COVID-19 activity. For example, countries/regions like the UK, Luxembourg, France, and Netherlands all observed declining COVID-19 activity through the last few weeks of summer but have been seeing an increase in activity over the past few weeks in September.

The recently emerged XEC variant is gaining prevalence in Europe, accounting for **20% of all sequenced cases** in the region, as of 28-Sep-2024.<sup>1</sup> The variant is predicted to become dominant in Europe by mid-October.<sup>2</sup>

## Vaccination Campaigns and Coverage

- **Spain** aims for 75% vaccination of older adults/healthcare workers and 60% for pregnant/at-risk individuals, citing a 71-77% drop in hospitalizations last year following a highly successful vaccine campaign achieving high coverage in vulnerable population groups.<sup>3</sup>
- Despite 18,000 flu-related deaths in recent years, vaccination rates declined across all age groups in the **UK**.<sup>4</sup>
- In the **US**, COVID-19 vaccines targeting KP.2 (Pfizer, Moderna) and JN.1 (Novavax) are being administered.<sup>5</sup>
- In **Germany**, RSV vaccination is now covered for seniors and those with health conditions.<sup>6</sup>
- In **Austria**, a lack of RSV vaccine supply has resulted in no publicly available infant immunization option, leaving the option to purchase privately from other countries at an estimated cost of 400-700 euros.<sup>7</sup>
- In **Russia**, flu vaccinations are offered in clinics and mobile units in Moscow<sup>8</sup>, with 73,000 people, including 26,000 children, vaccinated in the Oryol region.<sup>9</sup>
- Updated COVID-19 vaccines targeting Omicron are approved for all ages in **Canada**, with Ontario and Yukon prioritizing high-risk groups starting October 15. Health Canada has withdrawn old vaccines in favor of the new KP.2 formula.<sup>10</sup>
- Nirsevimab, which was shown to reduce RSV hospitalizations by 80-90% in **Spain, France**, and the **US**<sup>11</sup>, faces delivery challenges in **northern Germany** due to high demand and supply issues.<sup>12</sup>

## Current Cases and Hospitalization Trends

COVID-19 activity in the **US** is declining, with a 9.2% test positivity rate in wastewater.<sup>13</sup> Hospitalizations are highest for infants and seniors, while COVID-19 deaths remain stable at 2% of total deaths. RSV and flu cases are low but rising in the Southeast, with an additional pediatric flu death, totalling 201 for the 2023-2024 season. The KP.3.1.1 variant accounts for 58.7% of cases.

In **Germany**, healthcare practices are becoming overwhelmed due to a high wave of infections, including respiratory pathogens and coronavirus, potentially leading to the refusal of non-emergency cases.<sup>14</sup>

Nearly 400 flu cases were reported in a children's hospital in Nanjing, **China** in September, with cities like Shanghai and Xi'an also experiencing a surge in cases.<sup>15</sup>

**Lithuania**, cases of COVID-19, flu, and the common cold are rising in Antakalnis<sup>16</sup> and the Vilnius region.<sup>17</sup>

## Research, Innovations, and Public Health Initiatives

- hVIVO's Phase 2a trial for **Enanta Pharmaceuticals' RSV antiviral, EDP-323**, showed promising results, achieving an 85-87% reduction in viral load and a 97-98% decrease in infectious viral load in 142 healthy adults compared to a placebo.<sup>18</sup>
- The **US CDC** has introduced Community Snapshot, a tool providing weekly updates on respiratory diseases, including COVID-19 and flu, with risk levels ranging from low to very high.<sup>19</sup>
- **FDA** has approved the FluMist nasal spray vaccine in the US, offering greater availability and convenience.<sup>20</sup>

# The risk of tick-borne encephalitis virus transmission via substances of human origin

The ECDC has released an assessment on tick-borne encephalitis (TBE), focusing on the transmission risks of the TBE virus (TBEV) through substances of human origin (SoHO) such as blood, organs, tissues, and cells.

TBE is a viral infection transmitted primarily through tick bites or **consumption of unpasteurised dairy products** from infected livestock. It represents a growing public health concern in Europe, with thousands of cases reported annually in eastern and central Europe, and parts of Asia.

TBE is a **notifiable disease** in the EU/EEA, with 28 680 confirmed cases reported during the period 2013–2022, most being **locally-acquired autochthonous cases**. The mean **notification rate** in EU/EEA countries during this period ranged from **0.01 to 16.83 per 100 000 population**. Cases **peak** during **April–November**, coinciding with tick activity and outdoor human activities. More than **two-thirds** of TBEV infections remain **asymptomatic**, though the exact proportion is uncertain as mild clinical illness is not often diagnosed. Symptomatic cases generally present as a biphasic disease with an initial flu-like phase followed by a second phase characterised by inflammation of the central nervous system.

The **case-fatality** of TBE is **below 2%**, generally reported at 0.5%. However, **long-term sequelae** have been reported in **10–40% of patients** with neurological symptoms.

TBEV **transmission through SoHO is documented but rare**, with two cases reported via transfusion from one donor and three cases via organ transplant from another donor.

Reports of transmission are rare despite important TBE notification rates in endemic areas and non-trivial seroprevalence among blood donors. This suggests a very low likelihood of transmission of TBEV leading to symptomatic disease **through blood transfusion**. The **impact** of transmission of TBEV through blood transfusion is **unknown** and the **risk of transmission of TBEV through blood transfusion in EU/EEA cannot be assessed**.

**Transmission of TBEV through organ transplantation** has been reported from one donor and **all recipients of organs procured from the infected donor were infected by TBE**. **The likelihood of transmission of TBEV leading to symptomatic disease through organ transplantation is considered low**. The severity of the disease course may be associated with immunosuppression; however, it is important to note that **no specific antiviral treatments are available for TBEV**. **The impact of a transmission of TBEV through organ transplantation is considered moderate**. **The risk of TBEV transmission through organ transplantation in the EU/EEA is considered low**.

In the **absence of reported cases** of TBEV transmission **through tissue or cell transplantation**, **the likelihood and impact are unknown, and the risk for these SoHOs cannot be assessed**.

## Measures

Potential measures during TBEV transmission periods could include deferring blood donors reporting recent tick bites in affected areas for a period of 28 days; testing organ, tissue and cell donors for TBEV ribonucleic acid (RNA) and TBEV antibodies and identifying exposure risks in order to inform the transplant team.

A TBEV infection should be considered for recipients of organs, tissues, or cells who exhibit neurological symptoms if the donor had a risk of exposure to TBEV. Increasing vaccination rates in highly endemic areas could improve overall SoHO safety in relation to TBEV.

**There are still several areas of uncertainty in relation to TBE and the risk of TBEV infection through SoHO, including the infectious dose and viraemia levels in asymptomatic individuals.** Source: [ECDC](#)

Figure 1. Mean notification rates of confirmed locally-acquired TBE cases per 100 000 population, EU/EEA countries, 2013–2022

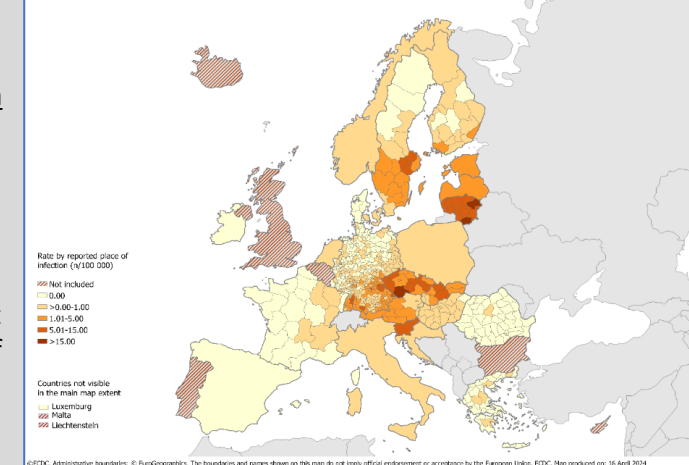


Figure 2. Mean, range of confirmed cases of TBE in EU/EEA countries, by month, 2013–2022

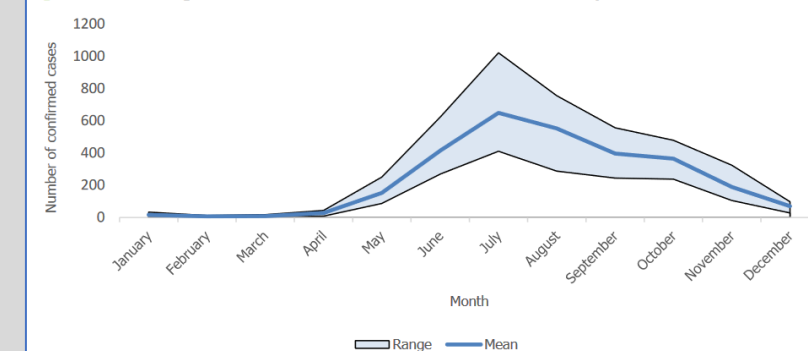
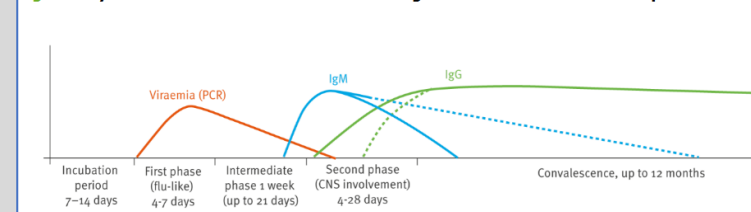
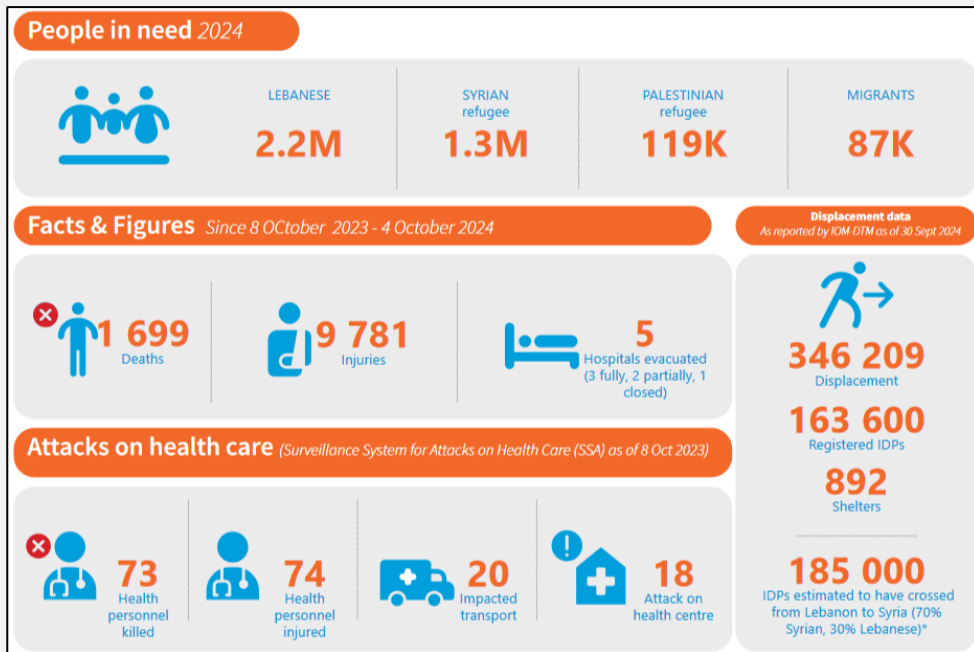


Figure 3. Dynamics of detectable molecular and serological markers for tick-borne encephalitis virus



## Health Situation in Lebanon

The ongoing conflict in Lebanon has sharply intensified, leading to widespread civilian casualties and severe damage to healthcare infrastructure. This escalation has caused a surge in deaths, trauma cases, displacement and major disruptions to essential health services. Lebanon's already fragile healthcare system – strained by economic collapse and a large refugee population – is now being subject to further, rapid degradation.



Attacks on health care continue to have a severe impact on health care services. WHO continues to monitor and validate attacks through the [SSA tool](#). As of Oct 4:

- 96 PHCCs and dispensaries have been forced to close;
- 77 health workers killed (28 on 3 October);
- 74 health workers injured
- Several health facilities including ambulance dispatch centers, had been directly targeted.
- One hospital in the South forced to evacuate its staff and patients.
- Many healthcare workers remain displaced, and others are not reporting for duty.
- No reported or confirmed disease outbreaks in the collective shelters or other parts of the country.

Source: [EMRO](#)

## First witness information on health in Gaza

Laura Paris, EPIET fellow at the Health Protection Surveillance Centre in Ireland (C2023), went on a GOARN deployment to support the health response in Gaza in 2024. This report includes her insight information.

As reported by UNOCHA, the Palestine Ministry of Health had recorded 35 091 fatalities, and 78 827 injuries between 7 October 2023 and 8 May 2024. Health services continuously face ever mounting constraints, with only 12 of 36 hospitals partially functioning, and six of UNRWA's 27 healthcare centres operational at the end of my deployment (8 May 2024).

Sanitation conditions in IDP shelters and the wider community are dire, with one toilet estimated for every 504 people and one shower for every 2 568 people, far exceeding Sphere emergency limits of a maximum of 20. Some people resorted to open defecation and consumption of contaminated water, further exacerbating disease spread.

As an epidemiologist, she is analysing and reporting infectious disease data at primary care level across the Gaza strip. This included the management and maintenance of UNRWA's infectious disease dashboard monitoring 10 diseases of epidemic potential including polio and cholera, verifying alerts, and conducting risk assessments.

An alarming and continuous **surge in infectious diseases** has been observed across all governates. **Acute hepatitis alerts** have been issued, and there has been a large increase in the number of disease cases compared with the previous year. Although the population sizes (i.e. the denominators for the data) are different between the two years, with the 2022 data representing the whole population and the 2023 data excluding people in the Northern Region, the data show a large increase in cases in 2023, highlighting the seriousness of the situation. For instance, in the period between epidemiological weeks 43 and 52 (i.e. 23 October and 31 December 2023), the incidence of **non-bloody diarrhoea increased by 33 times** among children younger than five years and by 99 times among individuals aged five years and older compared with the same period in 2022. **Bloody diarrhoea and impetigo** have seen dangerous increases over the same period (22 times and four times, respectively), underscoring the gravity of the health emergency.

Despite the efforts of humanitarian health responders, the health of people living in Gaza continued to deteriorate. At the end of my deployment, the situation worsened with the onset of a ground incursion in Rafah, which was hosting over 1.8 million IDPs at the time. This resulted in further destruction of healthcare and civilian infrastructure, the evacuation of international aid workers, and the re-displacement of people. During the short deployment, the UNRWA team experienced the loss of a colleague whose home was hit by missiles in Rafah. By the end of her deployment, a total of 186 UNRWA staff had died since the start of the conflict.

Source: [ECDC](#)

# The impact of widespread animal diseases on wildlife

Diseases already affecting domestic animals worldwide – including African swine fever (ASF) and high pathogenicity avian influenza (HPAI) – are endangering wildlife too, reminds a new report, posing a significant threat to biodiversity and jeopardising efforts to eradicate these diseases.

Between January and June 2024, 55 countries and territories have reported **3,800 outbreaks in wildlife**, with over 11,500 cases registered and **151 wildlife species** affected by **eight diseases**. Ten percent of these species are at risk of extinction according to the [International Union for Conservation of Nature \(IUCN\)](#). HPAI and ASF – two of the diseases that have the biggest impact on domestic animals – were also **responsible for most of the outbreaks reported**: 659 and 2,863 respectively.

## High pathogenicity avian influenza (HPAI)

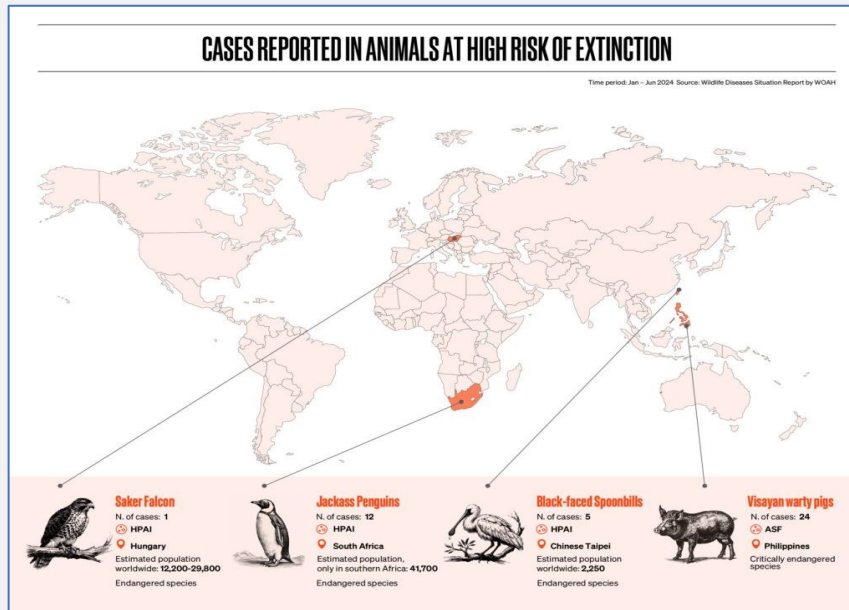
HPAI has led to the death and mass slaughter of **over 557 million poultry worldwide** between 2005 and 2023 and in 2024 it was [detected in the Antarctic region](#) for the first time. HPAI proved to be particularly dangerous for animals at risk of extinction.

In fact, it affected 13 out of 15 species at risk mentioned in the report, with particularly alarming cases reported in **Chinese Taipei**, where five black-faced spoonbills – whose population is estimated at 2,200 adult animals – died. Other notable cases include a case in a **saker falcon in Hungary** (estimated population between 12,200 and 29,800) and cases of **12 jackass penguins in South Africa** (with an estimated population of 41,700, existing only in southern Africa).

## Zoonotic potential

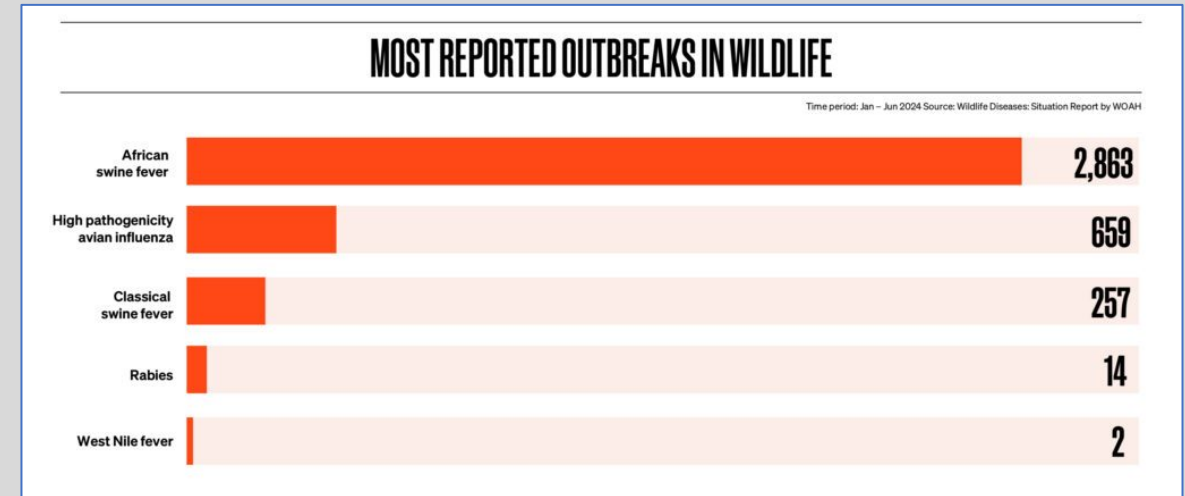
While HPAI usually affects domestic and wild birds, it has also been found in several species of wild mammals, **raising concern about its increasing capacity to spill over between species and its zoonotic potential**. Experts have closely monitored this over the years.

To date, HPAI has **only occasionally affected humans: mostly people working or living in close contact with animals, with limited capacity of human-to-human transmission**.



## African swine fever (ASF)

African swine fever (ASF) is the **most widespread disease in wildlife**, in term of outbreaks reported to WOA4 during the period, and the **second most impactful on animals at risk of extinction** (1 out of the 15 species at risk of extinction).



ASF currently affects millions of pigs and boars all over the world. With its significant death toll and the **connected containment measures** – including restrictions on animal movement and trade – ASF poses a **global threat to livestock and food security**. It is also becoming **more difficult to eradicate**, since a sylvatic (wildlife-based) epidemiological cycle has been established in many regions of the world, the report notes. In the Philippines, 24 **Visayan warty pigs**, a species surviving until today on few islands of the archipelago, have died due to ASF. WOA4 warns that from a broader perspective the reduction of wild suids could be an **ecological issue not only in terms of conservation, but also because of a potential increase in tensions between major predators, facing restricted access to food in their natural environment**.

## Summary

The report highlights the underlying interdependence between ecosystems. **The health of wildlife is deeply entwined with the health of other animals, the environment and even humans**. By reporting and monitoring diseases across the animal health spectrum, we safeguard livestock, food security, biodiversity, and human health – ultimately investing in a healthier, more sustainable future.

**Source:** [WOAH](#), These findings emerge from the latest [Wildlife Diseases Situation Report](#) by the World Organisation for Animal Health (WOAH), the periodic publication that analyses data from the World Animal Health Information System ([WAHIS](#)), the platform developed by WOA4 to collect and publicly share global animal health data.



# Other Infectious Disease Outbreaks - Americas



## West Nile virus (WNV) – Barbados

On 13 September 2024, the IHR-NFP for Barbados notified the WHO of a confirmed human infection with WNV in a child. **This marks the first detected human case of WNV reported from Barbados.**

On 10 June, the patient reported the onset of symptoms including headache, fever, vomiting, neck pain and painful knees, and visited a private clinic on 14 June. A test for dengue conducted on the same day was negative. The patient was hospitalized at the ICU on 16 June due to worsening of signs and symptoms, including joint pain, abdominal pain, altered mental status, and slurred speech. Cerebrospinal fluid analysis returned negative results for some bacterial and viral pathogens. Despite treatment, the patient's condition worsened. On 3 September 2024, blood samples were collected and sent to the Mayo Clinic in the USA for WNV testing. The presence of West Nile virus antibodies (IgG) was confirmed on 4 September 2024. The patient is still under care and recovering.

The patient reported visiting a horse stable in February 2024 and a beach frequented by horses on 8 June 2024, two days before symptom onset. Although these exposures to horses were considered risk factors for WNV infection, the precise source of infection remains unspecified. No other suspected cases of WNV were identified, but public health authorities continue to monitor the situation closely.

Although no cases of WNV have been documented in birds or horses in the country, it is possible that the virus is circulating in these populations undetected. Still the WHO assess the **overall risk** related to the public health as **low**.

Source: [WHO](#)

## Pertussis - United States

The US has reported an 11-fold rise in pertussis cases compared to the same period in 2023. Until October 5 there have been 17,579 cases (including two death) laboratory confirmed.

The majority of states are reporting increases greater than 2-fold compared to last year. Alaska is reporting the largest increase (96-fold) where cases have been elevated since July. This would be the largest epidemic in the state since 2012. Increasing cases have been noted among adolescents and adults in many states, possibly due to missed booster vaccinations. Due to the non-durable protection of current pertussis vaccines, a threshold over 95% is suggested for herd immunity.

Pertussis epidemics are cyclical with larger outbreaks reported every three to five years. 2019 marked the last major epidemic in the country within the past five years, with a total of 18,617 reported cases.

While the rising vaccine hesitancy has been a large contributor towards increases in vaccine preventable disease such as pertussis, some states such as Pennsylvania are reporting large outbreaks despite high immunization rates. This highlights the waning protection over time and the importance of up-to-date booster vaccinations in adults.

Source: [CDC](#), [CDC2](#)

## Highly Pathogenic Avian Influenza A H5N1 - United States (update)

On 10-Oct-2024, the California Department of Public Health (CDPH) confirmed a fourth human case of avian influenza H5N1 in the state. The case was identified in a Central Valley individual who had contact with infected dairy cattle, with confirmatory testing conducted by the CDC. Epidemiological investigations continue to suggest that all confirmed human cases in California have resulted from animal-to-human transmission, with no evidence of human-to-human spread. This marks the fourth human case in California associated with separate farms where infected animals were present.

Additionally, **two other potential human cases in the Central Valley are under investigation**, with samples submitted to the CDC for confirmatory testing (as of October 11).

Source: [CDPH](#), [CDC](#)

## Dengue – United States

As of 07-Oct-2024, the **first locally acquired case of dengue in San Diego County**, California is being investigated after an Escondido resident contracted the disease without leaving the region. This case does not appear to have any connections with the five previously reported locally acquired cases in Los Angeles County. Locally Acquired Cases have been reported from Florida (36 cases) and California (six cases) in 2024.

Source: [CDC](#), [NewsMedia](#)

## Rickettsial diseases – United States

The **first locally acquired human case of rickettsiosis in the country's northeast region**, caused by *Rickettsia parkeri*, has been confirmed in Connecticut. Previous, cases have been reported in the southeastern region.

Source: [ProMed](#)

## Rabies – United States

On 20-Sep-2024, the Minnesota Department of Health (MDH) and the CDC confirmed the death of a Minnesota man due to rabies. This case marks the **first confirmed human rabies death** in Minnesota for **2024**. The individual, a man from western Minnesota, was exposed to a bat in July 2024.

Source: [DoH](#)

## Rabies – Canada -Update

On 03-Oct-2024, the Brant County Health Unit **confirmed the death of a human case due to rabies** that was first reported on 06-Sep-2024.

The affected individual is reported to have been a child who was exposed to the virus in the Timiskaming region, just north of Sudbury. According to recently released information, the child was found with a bat in their room. The parents inspected the child but did not find any signs of a bite, scratch, or saliva and therefore a rabies vaccine was not used as post-exposure prophylaxis.

There has never been a confirmed case of rabies in a Brantford-Brant resident, and Ontario's last domestic case of human rabies occurred in 1967.

Officials from the Timiskaming Health Unit emphasized that this region has historically been **low risk for rabies**, making this case highly unusual. There is no current public health action required for residents of the Timiskaming District, although ongoing monitoring is in place.

Source: [NewsMedia](#), [BCHU](#)

# Other Infectious Disease Outbreaks - Africa



## Malaria – Ethiopia

Ethiopia continues to experience a significant and concerning rise in malaria cases and deaths. Malaria had been in decline in Ethiopia for approximately two decades before 2022. Despite increased efforts to control the disease, the main drivers of this upsurge since 2022 include: climate change, infected population movements triggered by conflict, geographic expansion of an invasive malaria vector *Anopheles stephensi*, and the potential resistance to antimalarial interventions.

Official information indicates that between January to August 2024, there have been over 4.7 million new malaria infections and 918 associated deaths. This number of cases has already surpassed the totals for 2023, when 3.7 million cases and 180 deaths were reported.

The majority of the cases have been reported in the regions of Oromia (53%), Amhara (15%), and Southwest Ethiopia (11%), with smaller but significant numbers in South Ethiopia and Benishangul Gumuz. In June 2024, a local report indicated that 11 individuals, including children, died from malaria in the West Wollega zone of Oromia. An expert from the Oromia Health Bureau disclosed that the disease is rapidly spreading to other areas, including Jimma, Illu Ababor, Nekemte, and Shashamane. In a single week, 57,000 cases were reported from government health facilities in Oromia alone.

Source: [ProMed](#), [NewsMedia](#), [NewsMedia2](#)

## Cholera - Sudan

There are concerns over a significant rise in the number of cholera cases and deaths in Sudan. The situation has worsened over the past month as civil war continues to ravage the country and is believed to be the major barrier to medical access in conflict areas.

Since the beginning of 2024, more than 550 deaths and 18,000 cases have been recorded in Sudan, according to the UNICEF. The outbreak has severely affected 10 of the country's 18 states, with the most impacted areas being Gedaref, Kassala, and River Nile. Some estimates suggest up to 150,000 people have died since the beginning of the cholera outbreak in 2023.

The conflict between Sudan's army and the paramilitary Rapid Support Forces (RSF) has exacerbated the crisis, with 70% of hospitals in conflict zones becoming non-operational, and national vaccination coverage dropping significantly across multiple diseases. Sudan is facing simultaneous outbreaks of other diseases, including dengue fever, malaria, and measles, further complicating the country's public health situation.

In response, UNICEF has delivered 1.4 million doses of oral cholera vaccines to Port Sudan, adding to the 404,000 doses provided last month. Vaccination campaigns aim to immunize 1.81 million people, focusing on the most affected regions.

Source: [UNICEF](#), [NewsMedia](#), [OCHA](#)

## Avian Influenza A(H9N2) – Ghana

On 26 August 2024, the International Health Regulations (IHR) National Focal Point (NFP) for Ghana notified the WHO regarding the country's first reported human case of infection with a zoonotic (animal) influenza virus. Subsequent laboratory tests confirmed the presence of the avian influenza A(H9N2) virus. According to epidemiological investigations, the patient, under five years old, had no known history of exposure to poultry or any sick person with similar symptoms prior to the onset of symptoms.

Illness among poultry has been reported in the Upper East Region, but the cause of the poultry disease had not been confirmed at the time of reporting. However, influenza A(H9N2) low pathogenicity avian influenza viruses have been reported in Ghanaian poultry farms since November 2017.

The Ghanaian government has implemented a series of measures aimed at monitoring, preventing, and controlling the situation.

Based on currently available information, WHO assesses the current **risk to the general population** posed by A(H9N2) viruses as **low** but is continuing to monitor these viruses and the situation globally.

Source: [WHO](#)

## Cholera - Nigeria

The Nigeria Centre for Disease Control (NCDC) has expressed concern over the alarming increase in cholera cases across the country. In 2024, as of 28-Sep, 10,837 suspected cholera cases and 359 deaths have been reported from 36 states.

This represents a 220% increase in suspected cholera cases compared to 2023 (3,387 cases) and a 239% increase in deaths compared to 2023 (106 fatalities). The case fatality rate (CFR) for 2024 is 3.3%, slightly higher than in 2023 (3.1%). In CW 39, 198 suspected cases and 15 deaths were reported across five states for a weekly CFR of 7.6%. Lagos State is heavily impacted, accounting for 43% (4,667 cases) of all suspected cases reported nationally this year. Children <5 years are the most affected age group, followed by children aged 5-14 years.

Flooding occurred in the Maiduguri Metropolitan Council (MMC) and Jere local government areas last month and continues to affect other parts of Borno State. On 4-Oct, officials declared a cholera outbreak in Borno State after 17 out of 148 samples tested positive for the disease.

The NCDC has highlighted barriers to curbing the outbreak including **inadequate access to clean water, poor sanitation practices and insufficient water, sanitation, and hygiene infrastructure** (including wastewater management facilities). The practice of open defecation, especially in rural areas, remains a significant issue.

In Adamawa State, an initial oral cholera vaccination campaign supported by UNICEF and the World Health Organization (WHO) ended on 2-Oct. It was launched on 26-Sep and consisted of 200,000 donated vaccines and additional medical supplies. Similarly, from 24-Sep to 29-Sep, almost 300,000 people were vaccinated in the MMC, Jere, Konduga and Mafa LGAs and an additional 600,000 doses have been allocated to Borno State. The country is expecting to receive an additional 1.5 million vaccines.

Source: [NCDC](#), [OCHA](#), [UNICEF](#)

# Other Infectious Disease Outbreaks – Africa/Southeast Asia



## Lassa Fever – Nigeria

In week 40, the number of new confirmed cases decreased from 9 in epi week 39, 2024 to 7. These were reported in Ondo and Edo States. Cumulatively from week 1 to 40, 2024, 174 deaths have been reported with a case fatality rate (CFR) of 17.0% which is the same CFR for the period in 2023.

In total for 2024, 28 States have recorded at least one confirmed case across 128 Local Government Areas. Sixty-eight (68%) of all confirmed Lassa fever cases were reported from these three states (Ondo, Edo, and Bauchi) while 32% were reported from 25 states with confirmed Lassa fever cases. Of the 68% confirmed cases, Ondo reported 28%, Edo 23%, and Bauchi 17%.

Source: [NCDC](#)

## Brucellosis - Algeria

On 13-Oct-2024, media sources reported 11 human cases of brucellosis in Algeria in 2024.

Official data is not available. The location of the affected individuals and the onset of their illness were not reported. It is unclear if these cases were a part of a localized outbreak or were widespread. Sources report a lack of brucellosis vaccination in cattle farms this spring as a causative agent for these human cases. The reason for not vaccinating cattle farms this year has not been reported or how many cattle farms were vaccinated.

Source: [ProMed](#), [Ncbi](#)

## Mpox - Tanzania

On 14-Oct-2024, unofficial reports suggest ongoing mpox transmission in Tanzania after evidence of a returning traveller with confirmed infection was reported in Zimbabwe. So far, no cases have been officially confirmed in Tanzania.

A 24-year-old male, who recently travelled to Tanzania in September (exact dates unspecified), developed mpox symptoms on September 29, raising concerns that he may have contracted the infection during his stay.

Similarly, neighboring Zambia reported its first mpox case last week, involving a Tanzanian man who developed symptoms a month after departing Tanzania. Although the timeline of symptoms and incubation period of the case in Zambia suggests that the man acquired the disease after leaving Tanzania, it highlights the current transmission dynamics related to international travel.

Source: [NewsMedia](#), [NewsMedia2](#)

## Dengue – Central African Republic (CAR)

Health authorities declared dengue outbreaks on 10 September 2024 in three districts (Bangui 1, Bangui 3 and Bimbo) of the capital city. Two dengue serotypes ( DENV-1 and DENV-2) have been detected for the ongoing outbreak. The newly declared dengue outbreak is occurring in a very challenging health system already exhausted with other ongoing emergencies, including outbreaks (Mpox, hepatitis E, measles, yellow fever) and the protracted humanitarian crisis linked to internal conflict and the impact of the ongoing conflict in neighbouring Sudan with thousands of refugees who have crossed the border into CAR.

Source: [WHO](#)

## Cholera - Niger

Niger is currently facing a cholera outbreak, with the first case reported by the Ministry of Public Health on August

27, 2024. In epidemiologic week 37 (ending 14 September 2024) alone, the country reported 113 new suspected cases with no confirmed cases or deaths. Since the onset of the outbreak in epidemiologic week 35 (ending 31 August 2024) till week 37, there have been a total of 172 suspected cases, 12 confirmed cases, six deaths and a cumulative fatality rate of 3.5%.

The cases have been identified in three of 13 health districts in Tahoa region, namely Bouza, Madaoua and Birni Konni health districts. Bouza district accounts for the highest number of cases, 45.0% (78 cases), while 67.0% (4 deaths) of the deaths were from Madaoua health district.

The cholera outbreak in Niger highlights **the country's vulnerability to waterborne diseases**; this has been exacerbated by the ongoing rainy season and severe flooding.

Source: [WHO](#)

## Lyme Disease- South Korea

On 14-Oct-2024, the Korea Disease Control and Prevention Agency (KDCA) reported a notable increase in autochthonous cases in Lyme disease cases in South Korea, raising concerns about tick vector endemicity in the country, likely driven by climate change.

In 2023, there have been a total of 45 Lyme disease cases, including 36 locally acquired cases, eight imported cases (unspecified overseas locations), and one of unknown origin. Since the first local case in 2012, Lyme disease cases in Korea have fluctuated, with 23 cases in 2019, 18 in 2020, 8 in 2021, and 22 in 2022.

The increasing presence of Lyme-carrying ticks has been confirmed across nearly all regions of South Korea, except Inje in Gangwon Province, Gwangju, Boseong in South Jeolla Province, and Jeju Island.

Source: [NewsMedia](#)

## Murine Typhus - India

On 11-Oct-2024, the Kerala State Health Department reported a human case of murine typhus (*Rickettsia typhi*) in a traveller. Although the disease has been reported historically in other regions of India, this is the **first case in Kerala**.

The patient was a 75-year-old man from Kerala with a recent travel history to Vietnam and Cambodia. The man sought medical care on 8-Sep-2024 after experiencing body pain, fatigue, and loss of appetite. He was admitted to SP Medifort Hospital in Thiruvananthapuram, where his condition worsened, leading to breathing difficulties and organ failure. Murine typhus was suspected based on the patient's symptoms and travel history. The diagnosis was confirmed through serological testing. The patient was treated with the antibiotic doxycycline. His condition stabilized, and he is expected to be discharged soon.

Source: [NewsMedia](#), [NewsMedia2](#)

# Other Infectious Disease Outbreaks – Middle East/Europe



## Middle East respiratory syndrome coronavirus (MERS-CoV) - Kingdom of Saudi Arabia

The WHO was notified of one human case of MERS-CoV on 5 September 2024, by the Ministry of Health of the Kingdom of Saudi Arabia (KSA).

The case is a male from the Eastern Region of KSA aged between 50-55 years. The patient is a non-health worker with several co-morbidities. Following field investigation, there was no evidence of interaction with camels. In KSA, follow-up has been completed for one household member, 23 health workers, and two patients who had contact with the case, with no secondary cases reported. Among close contacts listed in KSA, one travelled from Saudi Arabia to South Asia on 4 September. Flight details and personal information were retrieved to initiate contact tracing and follow-up, and no secondary cases have been identified in connection with this high-risk contact.

The patient was discharged on 13 September after receiving a negative test result for MERS-CoV, along with instructions to continue oral medication and to return for a follow-up appointment in five days. This follow-up was successfully completed on 19 September, confirming the patient's full recovery.

Since the beginning of the year, five cases including four deaths have been reported from KSA.

The notification of this case does not change WHO's overall **risk assessment**, which remains **moderate at both the global and regional levels**.

Source: [OutbreaksNewsToday](#)

## Crimean-Congo Hemorrhagic fever – Iraq

As of October 1, 178 Crimean-Congo Hemorrhagic fever (CCHF) cases have been reported in 2024, including 26 deaths the Iraqi Health Ministry reported. The southern province of Dhi Qar, known for rearing cattle, sheep, and goats, all of which are potential carriers of the disease, leads the country in CCHF cases.

Sources: [WHO](#)

## Diphtheria – Pakistan

On 12-Oct-2024, news media reported a substantial rise in diphtheria cases among children in Karachi, Pakistan. While specific details surrounding the outbreak were not provided, inconsistent information from earlier reports indicated over 100 deaths in Karachi, whereas other reports mention 166 cases and 28 deaths in the province (Sindh). Last year (2023) the Sindh Infection Disease Hospital reported 140 cases and 52 deaths. All diphtheria cases are being referred to the Sindh Infection Disease Hospital for treatment; however, health officials have noted a limited supply of diphtheria antitoxin.

Health officials point to inadequate routine vaccinations as a large contributing factor for the current outbreak. Vaccine coverage in 2023 (most recently available estimates) was 86% for three doses among one-year-olds, below the 90% target for childhood vaccines.

Source: [NewsMedia](#), [NewsMedia2](#)

## Chikungunya – Pakistan

Local media reports highlight a steady rise in chikungunya cases in Karachi, Pakistan, marking a resurgence of the mosquito-borne viral disease in the region. While there are challenges for case surveillance, reports also indicate that local hospitals are witnessing a rise in patients experiencing symptoms such as muscle pain, fatigue, and inflammation, suggesting that the number of cases is higher than official case reports. Karachi has reported 140 confirmed cases of chikungunya between May and September 2024, out of 189 individuals screened for the disease. The Ministry of Health has instructed local authorities to take immediate measures, including mosquito control efforts targeting Aedes mosquito breeding grounds, such as water catchments.

Source: [ProMed](#), [News](#)

## Dengue – Italy

On 08-Oct-2024, news media reported the **first ever locally acquired cases of dengue in Tuscany, Italy**.

Additionally, autochthonous cases reported nationally in 2024 to-date are greater than reports from 2023.

Cases of dengue virus infections have been identified in a family of three from Sesto Fiorentino (Florence), Tuscany. Two of the family members reported recent travel to the municipality of Fano in the Marche region, where a large cluster of locally acquired cases have been reported since mid-August 2024. Health authorities suggest that the final household member was infected in Tuscany, where a local mosquito could have bit the members with travel history before transmitting to the third individual. According to news media, the standard disinfection procedures following the identification of cases cannot currently be implemented in Sesto Fiorentino due to weather conditions.

In 2024, Tuscany region has reported one local case and 37 imported cases, while Marche region has reported 120 local cases and three imported cases. However, news media has noted that the outbreak in Fano has been declining recently. Nationally, 17 out of the 20 regions (administrative division) have reported at least one case (local or imported) in 2024.

Source: [NewsMedia](#), [ECDC](#)

## Vaccine-derived Poliomyelitis – French Guiana

Source: [PolioEradication](#), [CIDRAP](#)

As of 09-Oct-2024, the weekly update bulletin from the Global Polio Eradication Initiative (GPEI) reported that French Guiana detected its **first environmental samples** of circulating vaccine-derived poliovirus type 3 (cVDPV3). Three cVDPV3-positive environmental samples were collected from different locations in Cayenne province in May, June, and August 2024. No confirmed human cases of cVDPV3 have been reported as of this update.

## Vaccine-derived Poliomyelitis – Spain – Follow Up

In a follow-up on a recent circulating-vaccine-derived poliovirus (cVDPV) detected in environmental sample in the Barcelona metropolitan area, the weekly report from the GPEI has indicated that the strain has been identified as cVDPV2. **This marks the first recorded instance of cVDPV2 in Spain.**

Source: [PolioEradication](#), [CIDRAP](#)

## Poliomyelitis – Pakistan

Pakistan has been experiencing upward wild-poliovirus (WPV) human cases trends since the beginning of 2024. According to the most recent weekly case data from the Global Polio-Eradication Initiative (GPEI), there is a 450% increase in human cases when compared to cases in 2023.

There have been 34 human cases of WPV1 since the beginning of 2024, compared to six WPV1 human cases in 2023, 20 in 2022, one in 2021, and 231 between 2019 (147) and 2020 (84). This highlights that there is **continued spread in regions** affected by the virus, including urban and rural areas.

So far, Balochistan has recorded the highest number of cases this year, with 16, followed by Sindh (10), Khyber Pakhtunkhwa (4), Punjab (1), and Islamabad (1). Kashmir and Gilgit-Baltistan remain the only two polio-free regions in the country.

WHO data indicates that vaccination coverage for the 3rd dose polio vaccine stood at 86% in 2023, down from 93% in 2022. Polio herd immunity levels is achieved with at least 80% of the population vaccination, however this data indicates immunization gaps in communities.

Source: [NewsMedia](#), [WHO](#), [PolioEradication](#)