



News:

- CDC:** found that among those aged 5–18 years, receipt of ≥ 2 doses of an [original monovalent mRNA COVID-19 vaccine was 52%](#) effective against pediatric COVID-19 hospitalization and 57% effective against critical illness when the last dose was received within the four months preceding hospitalization, supporting existing recommendations to remain up-to-date with COVID-19 vaccination.
- CDC/AVMA:** reported the [first case of Avian influenza virus type A \(H5N1\) in dairy cattle ever in the U.S.](#) Tests so far indicate that the virus detected in dairy cattle is H5N1, Eurasian lineage goose/Guangdong clade 2.3.4.4b. This is the same clade that has been affecting wild birds and commercial poultry flocks and that has caused sporadic infections in several species of wild mammals and neonatal goats in one herd in the United States.
- WHO:** reports about the use of Ebola vaccines – worldwide in 2021–2023. The ICG Ebola vaccine stockpile reached the goal of 500 000 doses in 2022. As of December 2023, it held 518 890 doses. A total of 208 390 (40%) doses in the current stockpile are scheduled to expire in 2024. Doses from the ICG stockpile were first used in 2021 in DRC for outbreak response. The number of doses shipped from the stockpile has increased annually, from 4800 in 2021 to 13 870 in 2022 and 127 020 doses in 2023. During this period, 42 620 doses expired. Most of the doses shipped (139 120, 95%) were repurposed for preventive vaccination. Five percent (6570) of doses were shipped for outbreak response. DRC has received the largest number of vaccine doses (111 000, 76%), followed by Uganda (23 460, 16%) and Guinea-Bissau (11 170, 8%).
- WHO:** announced [broader categories for airborne pathogens](#) that do not rely on droplet size or distance spread, stating that all pathogen particles transmitted via air should be referred to as infectious respiratory particles (IRP). These IRPs will apply to influenza virus, measles virus, *Mycobacterium tuberculosis*, and SARS-CoV-2. WHO maintained that there will be a distinction between two types of through-the-air transmission: 1) airborne transmission or inhalation, when IRPs are expelled into the air and inhaled by another, and 2) direct deposition, when IRPs are expelled into the air and directly deposited on the exposed mouth, nose, or eyes of another.
- Nigeria:** has become the [first country to introduce the Men5CV vaccine](#), recommended by the WHO, to combat all five strains of meningitis – an infection that causes inflammation of the meninges, a membrane surrounding the brain and spinal cord. Meningitis has long been a public health concern in Nigeria. Last year, at least 303 cases and 190 deaths were recorded across 30 states.
- WHO:** The [thirty-eighth meeting of the Emergency Committee under the International Health Regulations \(2005\) \(IHR\) on the international spread of poliovirus](#) was convened by the WHO Director-General on 20 March 2024 with committee members and advisers meeting via video conference with affected countries, supported by the WHO Secretariat. The Emergency Committee reviewed the data on wild poliovirus (WPV1) and circulating vaccine derived polioviruses (cVDPV) in the context of the global target of interruption and certification of WPV1 eradication by 2026 and interruption and certification of cVDPV2 elimination by 2028. Technical updates were received about the situation in the following countries: Afghanistan, Angola, Côte d'Ivoire, Indonesia, Liberia, Mozambique, Pakistan, Sierra Leone, South Sudan and Sudan.

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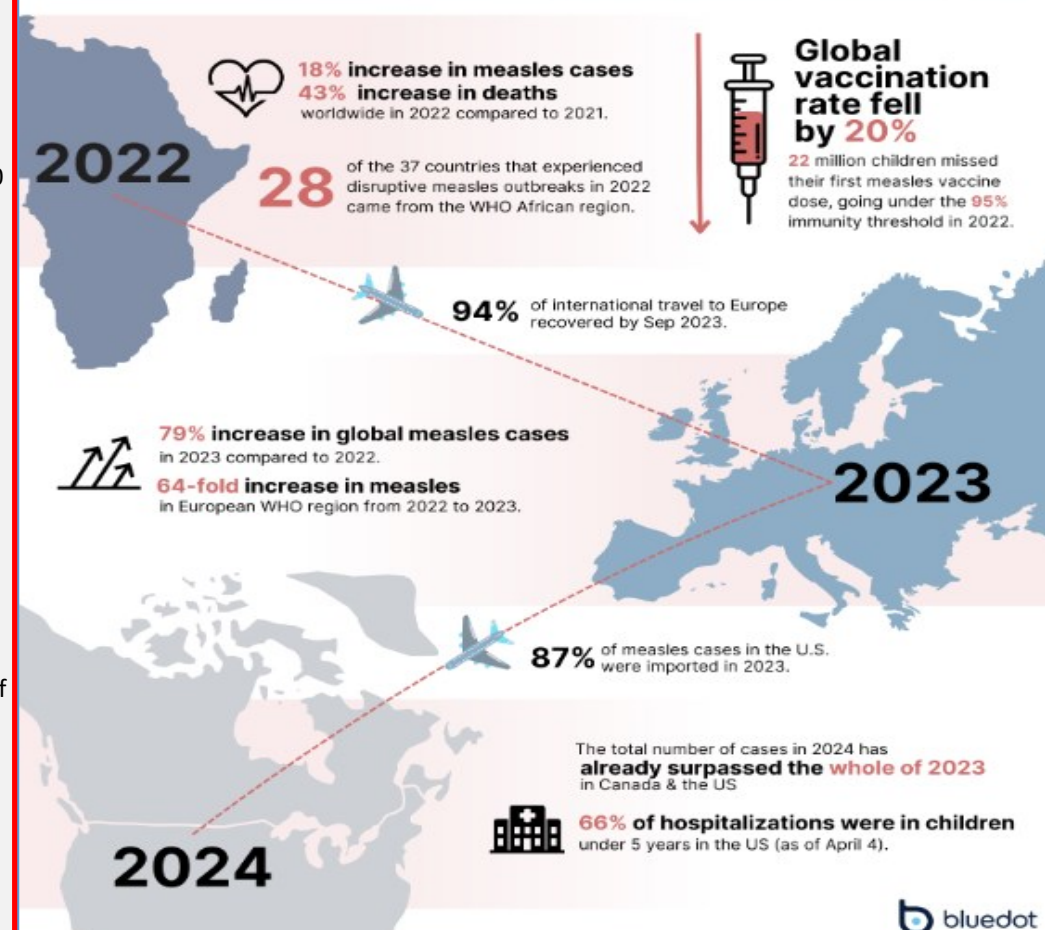
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THE RISE OF MEASLES

While numerous developed countries have effectively eliminated measles domestically, measles remains a significant public health threat, particularly in many countries in the African, South-east Asian, and Middle Eastern regions. This became more evident as the pandemic, among other factors, fueled a surge in cases, leading to its rapid global transmission over the last three years.



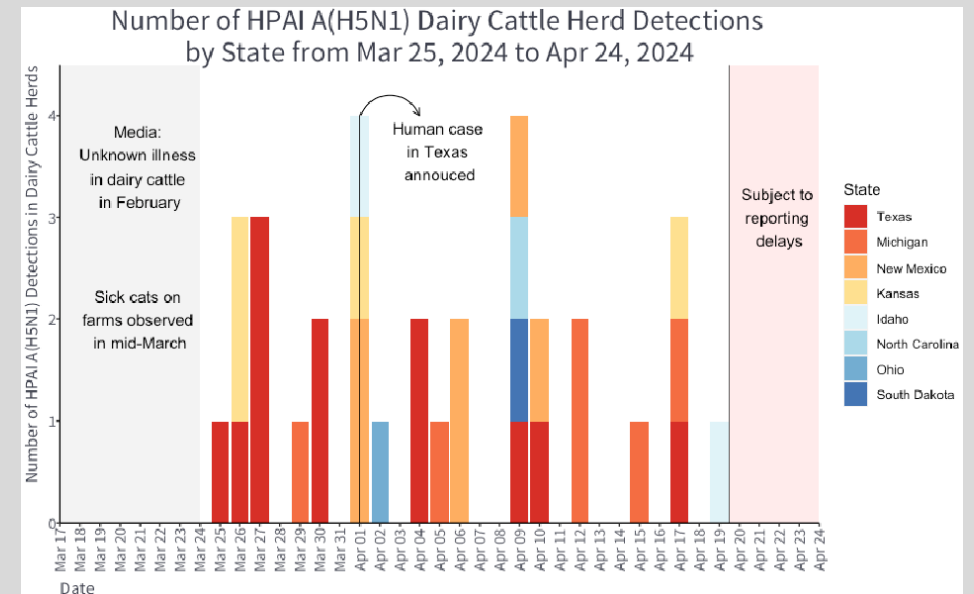
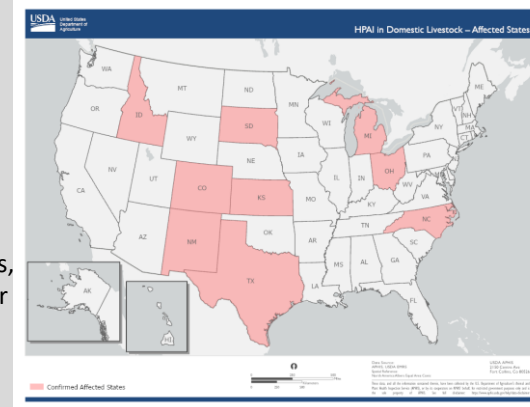
Highly Pathogenic Avian Influenza A(H5N1) in dairy cattle - United States

In early March 2024, authorities were investigating outbreaks of an unknown illness affecting dairy cattle in Texas, Kansas, and New Mexico. These herds were later confirmed with HPAI A(H5N1) for the first time. One human case has since been identified in Texas in addition to infected wild birds, a skunk, and domestic cats on and around some affected premises.

- It has been confirmed in dairy cattle in eight states: 12 herds in Texas, six each in New Mexico and Michigan, four in Kansas, two in Idaho, and one each in Ohio, North Carolina, South Dakota, and Colorado.
- Tests so far indicate that the virus detected in dairy cattle is H5N1, Eurasian lineage goose/Guangdong clade 2.3.4.4b. This is the same clade that has been affecting wild birds and commercial poultry flocks and that has caused sporadic infections in several species of wild mammals and neonatal goats in one herd in the United States.
- Recent evidence suggests the true number of affected farms is greater with asymptomatic cases being more prevalent than originally communicated. Early genomic analysis indicates spread may have begun as early as late 2023 or early 2024.
- While avian influenza virus type A (H5N1) is associated with high morbidity and mortality in birds ("highly pathogenic"), this hasn't been the case for dairy cattle. Affected animals reportedly recover with supportive treatment and with little to no mortality.
- The spread of the H5N1 virus within and among herds indicates that bovine-to-bovine spread occurs, likely through mechanical means. Evidence also indicates that the virus can spread from dairy cattle premises to nearby poultry facilities.
- Testing conducted thus far has **not** found changes in the virus that would make it more transmissible to humans.
- Infection with avian influenza virus type A (H5N1) was confirmed in a dairy farm worker in an area of Texas where the virus has been found in dairy cattle and wild birds. Eye redness (consistent with conjunctivitis) was their only symptom. The patient was told to isolate and received an antiviral for flu.
- People are advised not to drink raw milk or eat raw milk-based cheese.
- The case of H5N1 in this person does not change the health risk assessment for the U.S. general public, which the CDC continues to consider **low**. So far, the CDC's surveillance team has found no uptick in human cases of flu.
- In the United States, since 2022, USDA APHIS has reported HPAI A(H5N1) virus detections [in more than 200 mammals](#). Mammals can be infected with H5N1 bird flu viruses when they eat infected birds, poultry, or other animals and/or if they are exposed to environments contaminated with virus. Spread of H5N1 bird flu viruses from mammal to mammal is thought to be rare, but possible.

Key Takeaways

- The current event emphasized the **importance of One Health approaches** in the detection and mitigation of emerging outbreaks of H5N1. This includes sentinel surveillance of all relevant species and environments while recognizing that unknown factors contributing to outbreak spread hinder effective response measures.
- **Transmission among livestock is concerning** because of the dense contact within herds; and frequent contact with humans, wild and livestock populations. There is greater opportunity for 1) frequent spillover infections into humans, 2) sustained transmission within cattle promoting mammalian adaptive genetic changes, 3) subsequent outbreaks in other livestock populations, and 4) food safety and supply chain impacts.
- **The available information suggests a current low risk to the public**, given 1) the available sequenced samples do not indicate mammalian adaptation, 2) low viral loads detected in respiratory samples from affected cows suggesting a low risk of transmission to farm workers through air and respiratory secretions, and 3) a probable but unconfirmed low risk from pasteurized milk inferred from previous studies on the effect of pasteurization on other pathogens.



Trends in Influenza-Like Illnesses at the end of the 2023-2024 season - Europe

The end of the respiratory season is approaching in the northern hemisphere. This report explores how outpatient visits for influenza-like illnesses (ILIs) in Europe compared to last season and pre-pandemic, and in relation to COVID-19, respiratory syncytial virus (RSV), and influenza trends, where data are available.

Overall ILI Activity

Data was received using syndromic surveillance. The indicator used captures the total rate (per 10,000 population covered) of all outpatient visits to primary care providers that reported symptoms of fever with a cough or sore throat, within the last 10 days. This variable does not capture all cases of a respiratory illness but helps understand trends in ILI activity and potential burden on community-level healthcare.

Observations

Overall trends

The rate of clinic visits due to ILI-related symptoms has been decreasing on average across Europe since early February 2024, indicating that the ILI season is winding down. Rates of ILI activity remain above inter-seasonal baseline levels, which may be reached closer to June, based on historic trends.

Peaks

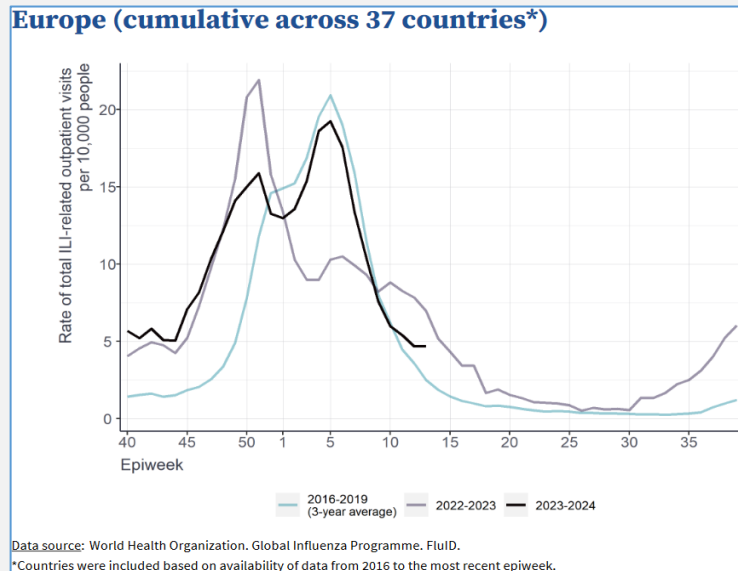
While the 2022-2023 season only had one peak, the current (2023-2024) season had two peaks – one during week 51 (week of 17-Dec-2023) at 15.9 ILI-related clinic visits per 10,000; and the second during week 5 (week of 28-Jan-2024) at 19.2 ILI-related clinic visits per 10,000.

Compared to previous season

In the 2022-2023 season, there was one peak during week 51 (week of 18-Dec-2022) at 21.9 ILI-related clinic visits per 10,000, after which activity consistently decreased for several weeks before seeing one comparatively smaller increase in epiweek 5 (week of 29-Jan-2023).

Compared to pre-pandemic

The timing of the second season peak is similar to the pre-pandemic years as both seasons observed their highest levels of activity at the end of January. In comparison, the highest level of activity in the previous season (2022-2023) was approximately 6 weeks earlier and occurred at the end of December.



Cumulative ILI activity

The total seasonal ILI activity of the current season (thus far) is higher than total seasonal pre-pandemic activity and lower than the previous season, though it is important to note that the current season is not over yet. The cumulative magnitude can be expected to be higher than pre-pandemic years due to COVID-19 activity adding to the burden of overall outpatient ILI activity. However, future reports will explore the extent to which changes in surveillance/testing intensity may also be contributing to the relatively higher burden observed since the onset of the pandemic.

Observations

Overall trends

- Most countries experienced a decrease in reported ILI outpatient visits over the past four weeks, while *Denmark, Serbia and Greece* experienced an increase.
- Poland did not experience a significant change in the rate of reported ILI-related outpatient visits over the past month.

National level trends

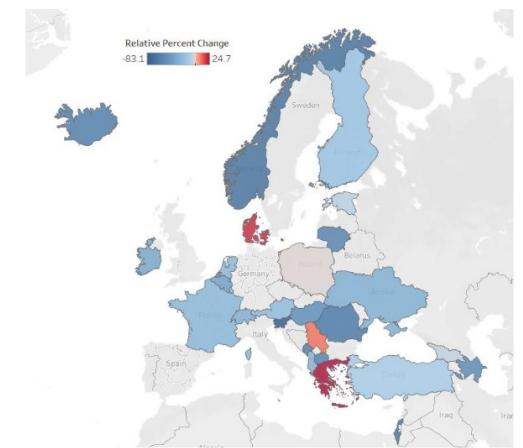
- *Greece* underwent the greatest increase (25% increase) in reported ILI-related outpatient visits over the past month while *Slovenia* had the greatest decrease (83% decrease)

Conclusions

- Overall ILI activity: Compared to pre-pandemic trends, there is a **cumulatively higher rate of ILI-related outpatient visits this year**, indicating a higher healthcare visit burden compared to pre-pandemic. This increase may be due to changes in health seeking behaviour and the additional presence of COVID-19.
- On average, **Europe is observing a decrease in overall ILI activity** and the respiratory disease season may be approaching its end for many countries. However, certain countries are experiencing an increase in ILI activity (for example, Denmark), suggesting that **trends vary geographically and are not consistent throughout a region**.
- Comparing disease activity for COVID-19, influenza, and RSV is challenging due to the limited availability of data and changes in testing policy and behaviour. However, estimation of percent positivity indicates that **disease activity appears to be similar to pre-pandemic levels for both influenza and RSV** in the current season.

Europe (national level)

Relative percent change in rate of ILI-related outpatient visits in the most recent epiweek (week of 24-Mar-2024) compared to the previous four epiweeks (25-Feb-2024 to 23-Mar-2024)*



WHO's Health Emergencies Programme: acute emergencies monthly summary

March 2024



The mission of the WHO's Health Emergencies Programme is to build the capacity of Member States to manage health emergency risks and when national capacities are overwhelmed, to lead and coordinate the international health response to contain outbreaks, provide effective relief and recovery to affected populations, and to research, prevent and manage epidemic and pandemic-prone diseases; to strengthen and expand systems to rapidly detect, investigate and assess potential threats to public health; and to respond immediately and systematically to manage acute emergencies.

Summary of published disease outbreak news reports (DON); [DON reports](#) are WHO's mechanism for publicly disseminating authoritative and independent timely information under the International Health Regulations (IHR 2005) on new and ongoing confirmed acute public health events.

- **Psittacosis – European region;** In February 2024, AUT, DEN, DEU, SWE and NDL reported an increase in psittacosis cases observed in 2023 and at the beginning of 2024, particularly marked since November-December 2023. Five deaths were also reported. Exposure to wild and/or domestic birds was reported in most of the cases.
- **Yellow fever – African Region;** Since the beginning of 2023, and as of 25 February 2024, a total of 13 countries in the WHO African Region have documented probable and confirmed cases of yellow fever (YF), including Burkina Faso, Cameroon, the Central African Republic, Chad, Congo, Côte d'Ivoire, the Democratic Republic of the Congo, Guinea, Niger, Nigeria, South Sudan, Togo and Uganda. Preliminary data for 2023 indicate a case fatality rate of 11%. While the overall risk at the regional level was re-assessed as moderate and the global risk remains low, active surveillance is required due to the potential for onward trans- mission through travel and the presence of the competent vector in neighbouring regions.

Epidemiological updates on graded events involving multiple countries

Cholera; Since the beginning of 2023, a cumulative total 824 479 cholera cases and 5900 deaths have been reported from 31 countries across 5 WHO regions, as of 31 March 2024, with the Eastern Mediterranean region recording the highest numbers, followed by the African, South-East Asia, Americas, and Western Pacific regions. No outbreaks have been reported in the European Region during this period.

The global cholera response continues to be affected by a critical shortage of oral cholera vaccines (OCV). Since January 2023, OCV requests have surged, with 79 million doses requested by 14 countries, double the 40 million doses available during this period. The global stockpile of vaccines was depleted until the beginning of March. As of 15 April, the stockpile has 2.3 million doses, which is below the global stockpile target of five million doses.

WHO classified the global resurgence of cholera as a grade 3 emergency in January 2023, its highest internal level for emergencies. Based on the number of outbreaks and their geographic expansion, alongside the shortage of vaccines and other resources, WHO continues to assess the risk at the global level as very high and the event remains classified as a grade 3 emergency.

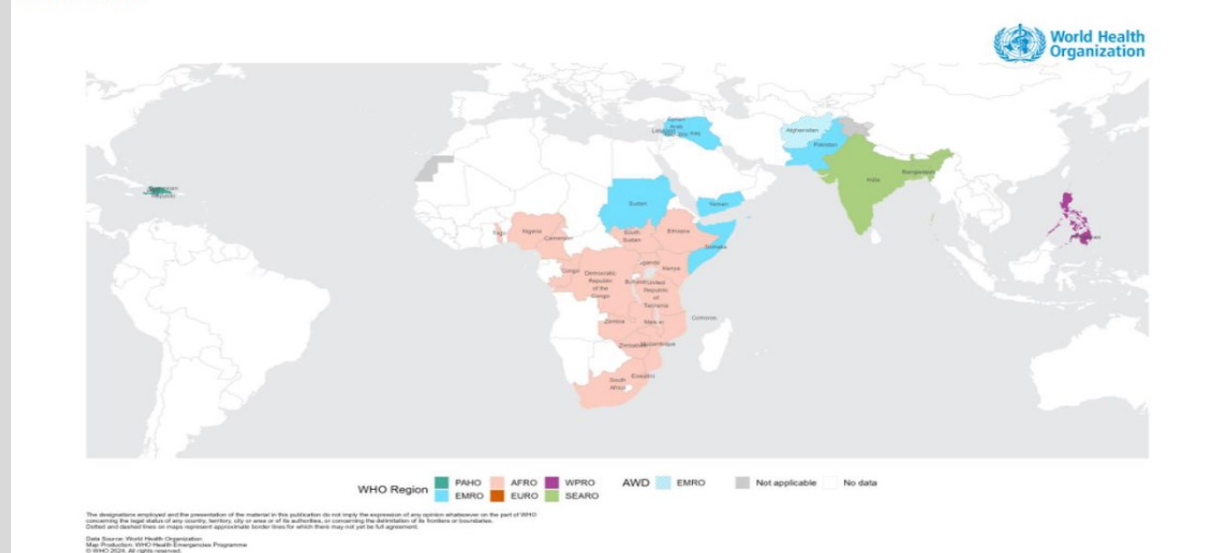
Multi-country outbreak of cholera, External situation report #13 - 17 April 2024 (data of 31 March 2024)

In March 2024 (epidemiological weeks from 10 to 13), a total of 25 424 new cholera cases were reported from 16 countries across two WHO regions, showing a 32% decrease from the previous month. The African Region registered the highest number of cases, followed by the Eastern Mediterranean Region. The period also saw 189 cholera-related deaths, highlighting a 33% decrease from the previous month globally. The observed declining trends should be interpreted with caution, as they coincide with the Easter holidays observed in some countries, which may have caused delays in reporting. Around the same time last year, 62 199 cases and 326 cholera-related deaths were reported from 22 countries.

While no new countries reported cholera outbreaks in March 2024, Comoros has seen a continued increase in cases and deaths since the beginning of the outbreak in early February. As of 31 March 2024, all three islands of the country (Ngazidja, Ndzuwani, and Mwali) have been affected, with a total of 678 cases and 17 deaths reported.

The dynamics of cholera outbreaks are increasingly complex due to factors that transcend national boundaries, such as population mobility, natural disasters, and climate change. The risk of transnational transmission is often heightened by porous borders with numerous unofficial entry points, inadequate surveillance at border areas, and limited awareness in cholera-affected communities.

Figure 1. Reported global epidemics of cholera and Acute Watery Diarrhoea (AWD), 1 January 2023 to 31 March 2024



Source: [WHO](#); [DON](#); [CholeraDashboard](#); [CholeraReports](#)

Updated terminology for airborne pathogens

Overview

World Health Organization (WHO) publishes a global technical consultation report introducing updated terminology for pathogens that transmit through the air. The pathogens covered include those that cause respiratory infections, e.g. COVID-19, influenza, measles, Middle East respiratory syndrome (MERS), severe acute respiratory syndrome (SARS), and tuberculosis, among others.

Terminology used to describe the transmission of pathogens through the air varies across scientific disciplines, organizations and the general public. While this has been the case for decades, during the coronavirus disease (COVID-19) pandemic, the terms 'airborne', 'airborne transmission' and 'aerosol transmission' were used in different ways by stakeholders in different scientific disciplines, which may have contributed to misleading information and confusion about how pathogens are transmitted in human populations.

The publication is the result of an extensive, multi-year, collaborative effort and reflects shared agreement on terminology between WHO, experts and four major public health agencies: Africa/Chinese/European United States Centers for Disease Control and Prevention.

The committee addressed a lack of common terminology to describe the transmission of pathogens through the air across scientific disciplines. The challenge became particularly evident during the COVID-19 pandemic as experts from various sectors were required to provide scientific and policy guidance. Varying terminologies highlighted gaps in common understanding and contributed to challenges in public communication and efforts to curb the transmission of the pathogen.

Terminology proposal:

The extensive consultation resulted in the introduction of the following common descriptors to characterize the transmission of pathogens through the air (under typical circumstances):

- Individuals infected with a respiratory pathogen can generate and expel infectious particles containing the pathogen, through their mouth or nose by breathing, talking, singing, spitting, coughing or sneezing. These particles should be described with the term '**infectious respiratory particles**' or IRPs.
- IRPs exist on a continuous spectrum of sizes, and **no single cut off points** should be applied to distinguish smaller from larger particles. This facilitates moving away from the dichotomy of previously used terms: 'aerosols' (generally smaller particles) and 'droplets' (generally larger particles).
- The descriptor '**through the air**' can be used in a general way to characterize an infectious disease where the main mode of transmission involves the pathogen travelling through or being suspended in the air.

Under the umbrella of 'through the air transmission', two descriptors can be used:

1. **Airborne transmission or inhalation**, for cases when IRPs are expelled into the air and inhaled by another person. Airborne transmission or inhalation can occur at a short or long distance from the infectious person and distance depends on various factors (airflow, humidity, temperature, ventilation etc). IRPs can theoretically enter the body at any point along the human respiratory tract, but preferred sites of entry may be pathogen specific.
2. **Direct deposition**, for cases when IRPs are expelled into the air from an infectious person, and are then directly deposited on the exposed mouth, nose or eyes of another person nearby, then entering the human respiratory system and potentially causing infection.

Figure 1. Potential modes of transmission of infectious respiratory particles



Source: Developed by A. Manna and L. Bourouiba, adapted from (8, 12, 22, 23).

Pathogens that can be transmitted to another human via contact transmission (direct contact) and not via transmission through the air (e.g. via hands) or indirectly via touching secondary objects (fomites e.g. tabletops), or that enter the human body via routes (e.g. open wounds, sharps or needle-stick injuries) or pathogens with an environmental reservoir with a predilection for lungs (e.g., Legionella and melioidosis) are not covered by the included descriptors but are referenced for completeness.

This consultation was the first phase of global scientific discussions led by WHO. Next steps include further technical and multidisciplinary research and exploration of the wider implementation implications of the updated descriptors before any update on infection prevention and control or other mitigation measures guidance is issued by WHO.

Ending disease in Africa: Responding to communicable and noncommunicable diseases 2023

The report specific highlights disease eradication, elimination and control across the Region include: the development of palliative care guidelines by Benin, one of the first countries in the Region to incorporate these into national planning; Benin and Mali validated for elimination of trachoma as a public health problem; Mauritius as the first country in the Region to fully implement WHO's package of tobacco control measures; the first cohort of the Mwele Malecela Mentorship Programme announced; WHO officially recognizes noma as a neglected tropical disease; and Cabo Verde certified as malaria-free, the third country in the Region to achieve this elimination status.

Examples of activities and achievements in 2023

Malaria; assisted several countries (including Liberia, Madagascar and Zimbabwe) with Global Fund application processes. 32 countries supported to conduct a review of their national malaria programmes, with 28 of them revising or developing a national malaria strategic plan following the reviews. Technical support provided to Côte d'Ivoire and Mauritania as part of implementation of malaria campaigns (seasonal malaria chemoprevention and long-life insecticide nets).

Leishmaniasis; Supported Ethiopia and Kenya in the adaptation of the visceral leishmaniasis/HIV treatment guideline for national use. Technical country mission to Ghana in October to support the development of national guidelines on the diagnosis and treatment of cutaneous leishmaniasis.

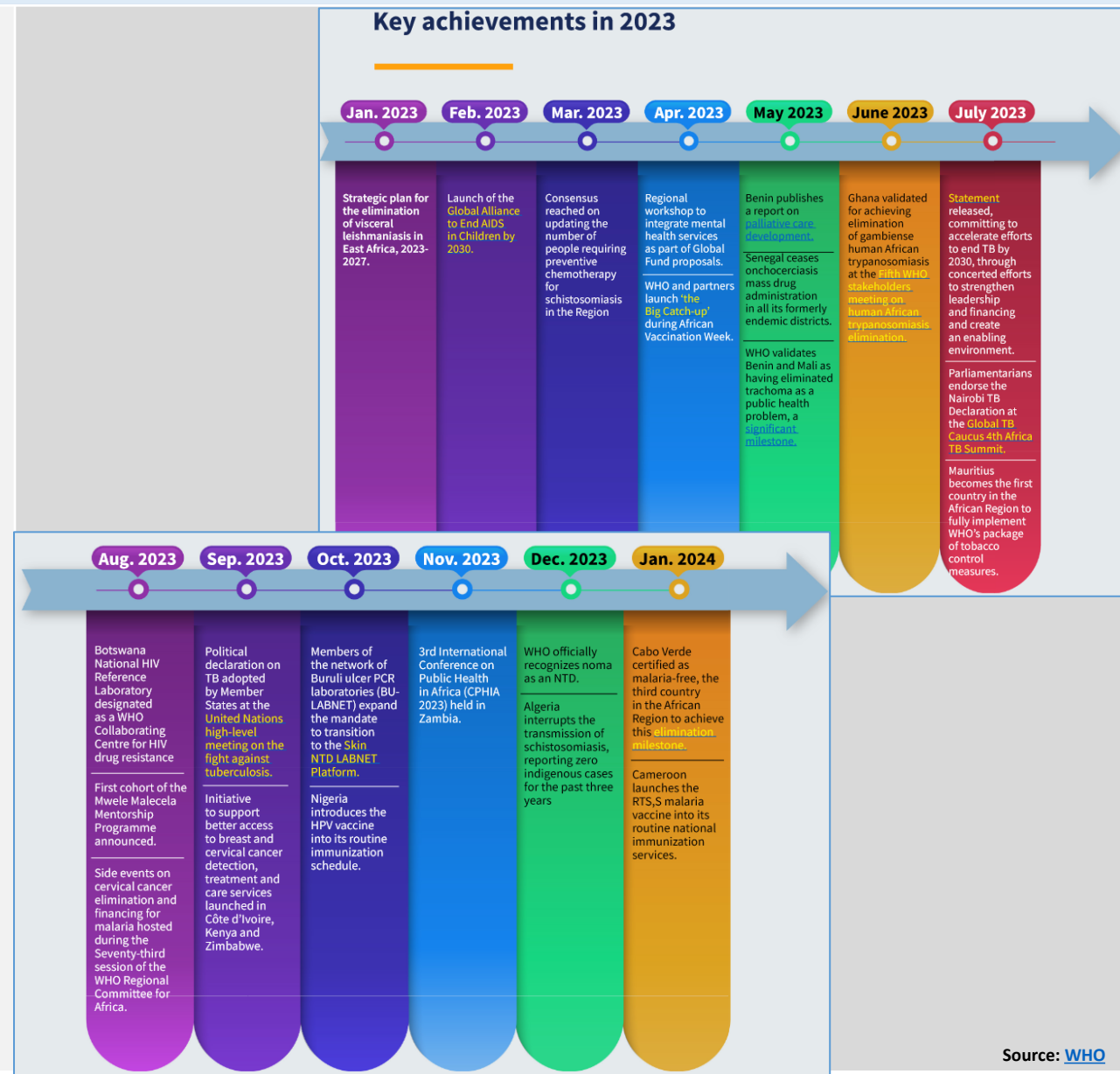
Tuberculosis; Supported 11 Member States to conduct TB programme reviews. Five countries supported in developing national TB strategic plans. Eight countries received technical support to review TB Global Funding requests. Support to all 47 Member States to address the need for scaling up the programmatic management of drug-resistant tuberculosis in the Region.

Skin NTD's; Technical support provided to Comoros, Kenya, the Democratic Republic of the Congo, Ethiopia and Madagascar, Namibia and Nigeria on leprosy programme or project reviews. Provided technical support to Mauritania and South Sudan on leprosy situation assessments. Supported Côte d'Ivoire as part of mass drug administration activities integrated with active case findings for leprosy, Buruli ulcer, yaws and other skin NTDs. Technical support provided to Guinea on leprosy contact tracing integrated with active case finding for leprosy, Buruli ulcer, yaws and other skin NTDs. Strengthened yaws surveillance in Togo through technical missions.

Vaccine-preventable diseases; All Member States supported for the development and implementation of the 2023 vaccine-preventable disease workplans. Seven countries supported to establish a national immunization technical advisory group. Supported Botswana, Eswatini, Lesotho, Malawi and Zimbabwe to conduct comprehensive EPI reviews, according to WHO guidelines. Annual polio-free certification documentation prepared and reviewed for 21 countries as part of submissions to the African Certification Commission, ensuring sustained efforts for polio eradication. Technical and financial support as part of 28 mass vaccination activities. On-site measles-rubella laboratory accreditation reviews conducted in three laboratories in West Africa. 19 country applications to Gavi, the Vaccine Alliance, for the introduction of the malaria vaccine successfully supported.

Guinea worm disease; Supported 20 Guinea worm disease priority countries to implement country-specific activities based on their epidemiological status and guidelines developed by WHO.

Key achievements in 2023



Statement following the 38th Meeting of the IHR Emergency Committee for Polio



The Emergency Committee reviewed the data on wild poliovirus (WPV1) and circulating vaccine derived polioviruses (cVDPV) in the context of the global target of interruption and certification of WPV1 eradication by 2026 and interruption and certification of cVDPV2 elimination by 2028. Technical updates were received about the situation in the following countries: Afghanistan, Angola, Côte d'Ivoire, Indonesia, Liberia, Mozambique, Pakistan, Sierra Leone, South Sudan and Sudan.

Wild poliovirus

There have been two new cases of WPV1 in Pakistan reported in 2024, both cases were detected in Balochistan province (Chaman and Dera Bugti districts). The significant increase in environmental detections have been sustained with 125 positive samples in 2023 and 34 positive samples to date in 2024. These detections indicate the spread of WPV1 from the endemic zone of Afghanistan (East Region) to other regions in Afghanistan (Balkh, Kabul and Southern provinces centered on Kandahar) to the traditional reservoirs of Pakistan (Karachi, Peshawar and Quetta Block) and neighboring or transit districts.

Both countries have made progress towards interrupting transmission of the two surviving genetic clusters of WPV1 (the YB3C cluster is endemic in Pakistan and the YB3A cluster is endemic in Afghanistan). In 2023, Afghanistan reported six cases of WPV1 from the East Region of the country. The 62 environmental samples that were positive for WPV1 all belong to the YB3A cluster. In 2023, Pakistan reported six cases of WPV1.

Both Afghanistan and Pakistan are implementing an intensive and synchronized campaign schedule focusing on improved vaccination coverage in the endemic zones.

Twenty months have now elapsed since the last recorded WPV1 case in Mozambique with onset of paralysis on 10 August 2022. More than two years have now elapsed since the single WPV1 case reported in Malawi.

Circulating vaccine derived poliovirus (cVDPV)

There are five newly reinfected countries reporting cVDPV2 since the last meeting: Angola, Liberia, Senegal, Sierra Leone and South Sudan. In South Sudan, there has been a new emergence; in the other four countries, reinfection has been due to importation events with Angola importing two different cVDPV2 emergence groups. Furthermore, a new cVDPV2 has been detected in Mozambique. In Côte d'Ivoire, there has been a rapid increase in environmental samples that have tested positive for cVDPV2.

There have been new emergences of cVDPV2 detected in Sudan and Mozambique. In Indonesia there has been a recurrence of cVDPV2, after an interval of 10 months with no detections, with three new cases and an environmental sample testing positive, all with links to Madura Island in East Java. Additionally, there has been a VDPV1 detected in Central Papua which is under further investigation. There has been no new country reporting cVDPV1.

The committee noted that in the African Region, which now uses novel OPV2 exclusively, there has been a total of 10 new cVDPV2 emergences detected that have emerged from novel OPV2 use, while there has been one such emergence identified in Egypt in the Eastern Mediterranean Region. The detection of nOPV2-derived VDPV2 strains, including cVDPV2, is an expected finding with increased nOPV2 use. The vaccine nOPV2 continues to demonstrate significantly higher genetic stability and substantially lower likelihood of reversion to neurovirulence relative to Sabin OPV2.

The committee noted that much of the risk for cVDPV outbreaks can be linked to a combination of inaccessibility, insecurity, a high concentration of zero dose and under-immunized children and population displacement. These factors are most evident in northern Yemen, northern Nigeria, south central Somalia and eastern DR Congo, but also in northern Mozambique, Burkina Faso, Mali, South Sudan and Sudan.

Conclusion

The Committee unanimously agreed that the **risk of international spread of poliovirus still remains a Public Health Emergency of International Concern (PHEIC)** and recommended the extension of Temporary Recommendations for a further three months.

States infected with cVDPV2, with or without evidence of local transmission:

1. Algeria	most recent detection 29 January 2024
2. Angola	most recent detection 24 January 2024
3. Benin	most recent detection 5 December 2023
4. Botswana	most recent detection 25 July 2023
5. Burkina Faso	most recent detection 4 June 2023
6. Burundi	most recent detection 15 June 2023
7. Cameroon	most recent detection 28 September 2023
8. Central African Republic	most recent detection 7 October 2023
9. Chad	most recent detection 5 December 2023
10. Republic of the Congo	most recent detection 7 December 2023
11. Côte d'Ivoire	most recent detection 25 January 2024
12. Democratic Republic of the Congo	most recent detection 7 December 2023
13. Egypt	most recent detection 31 January 2024
14. Guinea	most recent detection 24 December 2023
15. Indonesia	most recent detection 7 December 2023

States infected with WPV1, cVDPV1 or cVDPV3 with potential risk of international spread

WPV1	
Afghanistan	most recent detection 23 January 2024
Malawi	most recent detection 19 November 2021
Mozambique	most recent detection 10 August 2022
Pakistan	most recent detection 29 February 2024
cVDPV1	
Madagascar	most recent detection 16 September 2023
Mozambique	most recent detection 6 November 2023
Malawi	most recent detection 1 December 2022
Democratic Republic of the Congo	most recent detection 24 November 2023

16. Kenya	most recent detection 17 October 2023
17. Liberia	most recent detection 24 January 2024
18. Malawi	most recent detection 2 January 2023
19. Mali	most recent detection 29 December 2023
20. Mauritania	most recent detection 18 October 2023
21. Mozambique	most recent detection 8 December 2023
22. Niger	most recent detection 19 December 2023
23. Nigeria	most recent detection 18 January 2024
24. Senegal	most recent detection 6 November 2023
25. Sierra Leone	most recent detection 5 January 2024
26. Somalia	most recent detection 15 December 2023
27. South Sudan	most recent detection 21 December 2023
28. Sudan	most recent detection 11 January 2024
29. United Republic of Tanzania	most recent detection 20 November 2023
30. Yemen	most recent detection 11 December 2023
31. Zambia	most recent detection 6 June 2023
32. Zimbabwe	most recent detection 27 December 2023

States no longer polio infected, but previously infected by WPV1 or cVDPV within the last 24 months

WPV1		
None		
cVDPV		
country	last virus	date
Canada	cVDPV2	30 August 2022
Djibouti	cVDPV2	22 May 2022
Ethiopia	cVDPV2	1 April 2022
Ghana	cVDPV2	4 October 2022
Israel	cVDPV2	13 February 2023
Togo	cVDPV2	30 September 2022
United Kingdom	cVDPV2	8 November 2022
United States of America	cVDPV2	20 October 2022

Other Infectious Disease Outbreaks and disasters – Asia



Climate risks - Asia

The World Meteorological Organization's annual report has found that Asia continues to be the most disaster-prone region due to weather, climate, and water-related hazards. Floods and storms caused the greatest casualties and financial damage across the continent. Many countries in the region experienced their hottest year on record in 2023. Last year saw 79 hydro-meteorological hazard events across the Asian continent, with 80% related to flooding and storms that led to more than 2,000 fatalities and nine million people directly affected.

Source: [NewHumanitarian](#), [WMO](#)

Dengue – Indonesia

The Indonesian Ministry of Health reported a surge in cases and deaths from dengue since mid-February. Although the rise in disease activity continues to be reported across the country, media reports have highlighted the Tangerang Regency and Bali as current disease hot spots.

As of late March, West Java was the province reporting the highest volume of cases. Health officials also highlighted that Bandung, Jepara, Subang, Kendal, and Bekasi City were the locations experiencing the highest rates of disease activity.

Other areas reporting elevated dengue activity include Central Kalimantan, East Java, Lampung, South East Sulawesi, and South Kalimantan.

In the Banten province, the Tangerang Regency recorded a 174.9% increase in cases and a 179.4% increase in deaths registered as of epiweek 15 of 2024 compared to the same period last year.

In Bali, an increase of 65% in cases was registered in March-2024 compared to the same month last year.

Source: [NewsMedia1](#), [Crisis24](#), [ProMed](#)

Avian Influenza A H10N3 – China

On 12-Apr-2024, the ECDC reported one case of avian influenza H10N3 from Kunming City, in the southwest province of Yunnan. A 51-year-old male farmer from Kunming City (Yunnan province) presented with symptoms on 28-Feb-2024. He was hospitalized on 6-Mar-2024 with severe pneumonia. The patient currently remains in critical condition. The patient had previous exposure to farm animals, including dead poultry and ducks. No family members have developed symptoms. Close contacts and environmental samples have tested negative for influenza A (H10N3) virus.

Including this one, only three cases of avian influenza A(H10N3) virus have been reported to date, all of them in China. The first case was reported in the Jiangsu Province in Apr-2021 in a man in his forties; the second case was reported in the Zhejiang Province in Jun-2022 in a man in his thirties. Both cases recovered.

Source: [ECDC](#)

Avian Influenza - Vietnam

This is a follow-up on the first human case of avian influenza pending subtype A(H9Nx) reported in Vietnam this year in April 2024. Further analysis has confirmed that the individual has been affected by avian influenza A(H9N2). The 37-year-old individual with previous underlying health conditions is still being treated in a negative pressure isolation room in the ICU at Ho Chi Minh City Hospital for Tropical Diseases with severe respiratory complications (pneumonia) and sepsis (blood infection). 15 individuals in close contact with the index case of the patient have been identified and their health continues to be monitored. No additional cases have been detected to date. No evidence of person-to-person transmission has been reported.

According to the Department of Preventive Medicine, from 2015 until now, the Western Pacific region has recorded 98 cases of influenza A/H9N2, including 2 deaths. Of these, 96 cases are in China and 2 cases are in Cambodia. Two deaths were people with underlying health conditions.

Source: [NewsMedia](#)

Rabies – Timor Leste – first documented case -

On 10-Apr-2024, the WHO reported the first documented human rabies case in Timor-Leste, a country that has historically been designated rabies-free (canine variant). The case, from Pasabe Sub-Region, Oecusse, with a history of dog bite on 26 December 2023, went to a local health center on 20 March and died on 22 March 2024. As of 26 March, a total of 29 suspected rabies cases in humans, with exposure to dogs, were reported in Oecusse Municipality this year. All suspected cases have been administered the Tetanus Toxoid (TT) and Rabies PEP vaccines. However, the Rabies Immune Globulin (RIG) serum could not be provided because it was out of stock.

It should be noted that Oecusse is an enclave of Timor-Leste located within Indonesia East Nusa Tenggara province (NTT) where between 1 January and 15 March 2024, six human rabies deaths have been recorded. In 2023, a total of 30 human rabies deaths were reported from NTT province.

Based on the current available information, the WHO assesses the **risk** posed by this event as **high at the national level** and **low at regional and global levels**.

Source: [Reliefweb](#)

B Virus – Hong Kong – first documented case -

On 03-Apr-2024, the Centre for Health Protection reported a case of B virus (Macacine Herpesvirus 1, Herpes B, herpesvirus B) in a 27-year-old man in Hong Kong. The man visited the Kam Shan Country Park in late February when he was attacked and injured by wild macaque monkeys. The individual was admitted to the hospital on 21-March after experiencing symptoms of encephalitis. He is receiving treatment in the hospital's intensive care unit and is in critical condition. So far, no other individuals or close contacts have reported any symptoms. While cases of B virus have been reported in the US, Canada, Japan and mainland China, this is the first case reported in Hong Kong.

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

Other Infectious Disease Outbreaks - Americas



Climate risks - Latin America

The Lancet published a report showing that all countries in Latin America have experienced a warming trend over the last two decades. In the 2013-2022 period, Latin American countries saw an average 140% increase in heat-related deaths compared to 2000-2009, with the biggest rises in Ecuador (+339%) and El Salvador (+230%). Economic losses in 2022 were nearly eight times the \$2 billion in 2021, mainly because of floods and landslides in Brazil. The report also found that the transmission potential for dengue soared by 54% from 1951-1960 to 2013-2022.

Source: [NewHumanitarian](#), [Lancet](#)

Dengue - Argentina

According to the latest National Epidemiological Bulletin of the Ministry of Health of the Nation, nationally there has been a 335% increase during the 2023/2024 dengue season when compared to the 2022/2023 dengue season, and a 869% increase when compared to the 2019/2020 dengue season. All regions across Argentina have laboratory confirmed dengue cases.

The Argentine Ministry of Health has reported the first substantial decline in dengue fever cases during the current 2023/2024 dengue season which began on 30-Jul-2023. The decline occurred during epiweeks 13 and 14 (24-Mar-2024 to 06-Apr-2024), following a continuous increase in cases which had been reported since 2023 epiweek 50 (10-Dec-2023). This decrease may be a result of the reporting process and additional cases may be added to epiweeks 13 and 14 in the coming weeks.

In total 269,678; 90% autochthonous have been reported, 7% under investigation, and 3% imported (252,566 reported cases in 2024). 643 (0.24% of overall reported) have been severe Dengue cases and 197; 0.07% of overall reported died (187 deaths in 2024). The most affected regions were, Center (54,660; 39%), Northeast (47,434; 34%), Northwest (35,168; 25%), Cuyo (2,189; 1.6%), and South (689; 0.49%).

A major cause of the increase in dengue activity is a weather phenomenon called "El Niño", a cyclical warming of the world's oceans and weather which fuels tropical cyclones in the Pacific. This is a key driver for the uptick in cases since wet conditions favour mosquito activities. Multiple news media outlets have reported on the shortage of mosquito repellent and sudden price inflation of supply that is available to the public. In tandem with the hot humid summer and increase in cases, this has led to an increased strain on the healthcare system.

Source: [Argentina.gob.ar](#), [Argeninta.gob.ar2](#), [WMO](#)

Cholera – Brazil

On 19-Apr-2024, Brazil's Ministry of Health confirmed the first locally acquired case of cholera in Brazil after almost 20 years without autochthonous cases of cholera. The press release indicated that an "isolated" case of cholera was identified in Salvador, the capital city of Bahia state, northeastern Brazil. The affected individual is a 60-year-old man who developed initial symptoms in March and has since recovered. However, there is limited information about the possible source of exposure. Official information just highlighted that the affected individual has no recent travel history outside of the country, and no known contact with a confirmed case of cholera. Laboratory results confirmed *Vibrio cholerae* serogroup O1 Ogawa, the most frequently associated pathogen for ongoing cholera outbreaks.

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

Highly Pathogenic Avian Influenza A(H5N1) in dairy cattle - United States

In early March 2024, authorities were investigating outbreaks of an unknown illness affecting dairy cattle in Texas,

Kansas, and New Mexico. These herds were later confirmed with HPAI A(H5N1) for the first time. One human case has since been identified in Texas in addition to infected wild birds, a skunk, and domestic cats on and around some affected premises.

It has been confirmed in dairy cattle in nine states: 12 herds in Texas, six each in New Mexico and Michigan, four in Kansas, two in Idaho, and one each in Ohio, North Carolina, South Dakota, and Colorado.

Tests so far indicate that the virus detected in dairy cattle is H5N1, Eurasian lineage goose/Guangdong clade 2.3.4.4b. This is the same clade that has been affecting wild birds and commercial poultry flocks and that has caused sporadic infections in several species of wild mammals and neonatal goats in one herd in the United States.

Recent evidence suggests the true number of affected farms is greater with asymptomatic cases being more prevalent than originally communicated. Early genomic analysis indicates spread may have begun as early as late 2023 or early 2024.

While avian influenza virus type A (H5N1) is associated with high morbidity and mortality in birds ("highly pathogenic"), this hasn't been the case for dairy cattle. Affected animals reportedly recover with supportive treatment and with little to no mortality.

The spread of the H5N1 virus within and among herds indicates that bovine-to-bovine spread occurs, likely through mechanical means. Evidence also indicates that the virus can spread from dairy cattle premises to nearby poultry facilities.

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

Measles – Canada - update -

According to media and official sources, between 01-Jan-2024 and 10-Apr-2024, there have been at least 55 measles cases reported in four provinces (British Columbia, Ontario, Quebec, and Saskatchewan), within 18 different municipalities across Canada. Since our last update on 20-Mar-2024, there are 15 additional measles cases, two new reporting municipalities, and there continues to be no new reporting provinces.

Quebec, making up 78% (43 of 55) of the reported measles cases in Canada, continues to report the highest number of cases across all reporting provinces. Limited case details are available for four of the seven affected municipalities in Quebec; there is a continued possibility that these municipalities with insufficient information are experiencing suspected community transmission. Quebec's 2021 childhood and 2023 adult vaccination coverage with at least one measles vaccine were both below the 95% target threshold required for herd immunity. There is limited information available to indicate how vaccination coverage may be changing in light of the ongoing outbreak.

Source: [GovCan](#), [Quebec.ca](#), [NewsMedia](#), [drugshortagescanada](#), [drugshortagecanada](#)

Other Infectious Disease Outbreaks - Americas



Unknown Respiratory Illness - Argentina

Local media reports are raising concerns over a cluster of at least 60 individuals who have developed severe atypical pneumonia requiring critical care in Buenos Aires, the capital of Argentina. Epidemiological and clinical investigations have so far highlighted that:

1. The affected individuals are mostly young people without major risk factors or underlying health conditions.
2. The pneumonia appears as bilateral consolidation on chest CT scans.
3. Patients often require mechanical ventilation.
4. Laboratory reports indicate so far that 20 out of the 60 cases resulted positive for psittacosis with just 10 confirmed by PCR.
5. Many of the affected individuals have no apparent history of contact with birds.

Source: [ProMed](#)

Cholera – Brazil

On 19-Apr-2024, Brazil's Ministry of Health confirmed the first locally acquired case of cholera in Brazil after almost 20 years without autochthonous cases of cholera. The press release indicated that an "isolated" case of cholera was identified in Salvador, the capital city of Bahia state, north-eastern Brazil. The affected individual is a 60-year-old man who developed initial symptoms in March and has since recovered. However, there is limited information about the possible source of exposure. Official information just highlighted that the affected individual has no recent travel history outside of the country, and no known contact with a confirmed case of cholera. Laboratory results confirmed *Vibrio cholerae* serogroup O1 Ogawa, the most frequently associated pathogen for ongoing cholera outbreaks.

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

Highly Pathogenic Avian Influenza A H5N1 - United States

01-Apr-2024, the first human case of avian influenza A(H5N1) was reported in an individual with exposure to dairy cattle in Texas, United States. The affected individual was tested for influenzas last week following symptoms of conjunctivitis. The CDC confirmed the diagnosis of influenza A(H5N1). Limited information involving the affected individual was specified, including demographic details or timeline of events. Official communications indicated that the individual had recent exposure to dairy cows suspected to be infected with avian influenza. The patient is in isolation while recovering and had been provided oseltamivir (antiviral treatment).

Texas is one of the states that has recently confirmed H5N1 among dairy cows following reports of flu-like symptoms.

The last and only other case reported in the US was on 28-Apr-2022 in Colorado in an individual with exposure to infected poultry.

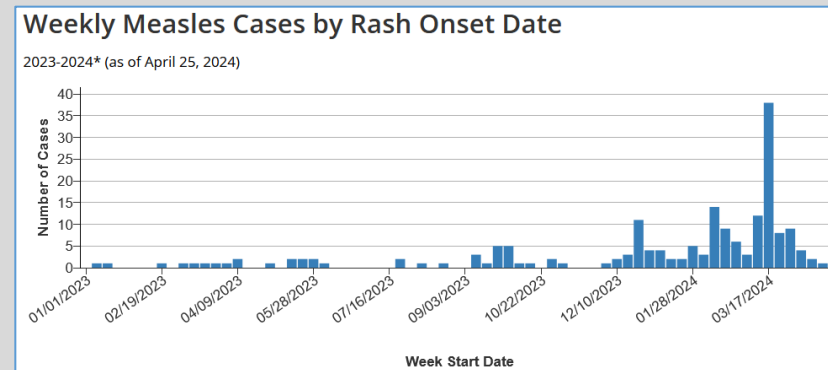
Source: [TexasGov](#), [TexasGov](#), [CDC](#)

Measles – United States – Update -

As of April 26, 2024, a total of 128 measles cases were reported by 20 jurisdictions since the beginning of the year: Arizona, California, Florida, Georgia, Illinois, Indiana, Louisiana, Maryland, Michigan, Minnesota, Missouri, New Jersey, New York City, New York State, Ohio, Pennsylvania, Vermont, Virginia, Washington, and West Virginia. There have been 7 outbreaks (defined as 3 or more related cases) reported in 2024, and 67% of cases (86 of 128) are outbreak-associated. For comparison, 4 outbreaks were reported during 2023 and 48% of cases (28 of 58) were outbreak-associated. 93% of the total reported cases have been among individuals with recent international travel (outside of the USA), however, specified abroad locations have been not disclosed in many of the cases. Of 113 cases, 65 (58%) individuals have required hospitalizations due to measles complications, with the highest percentages in young children and adults. Of 113 cases, 83% of individuals have been unvaccinated or had an unknown immunization status.

1. [Florida State](#); Health officials' investigations have identified the state of Florida outbreak as a probable common link in measles cases reported in at least three other states earlier this year. These include the states of Indiana, Louisiana, and Ohio. However, it is unclear if these cases are the same as those reported by the Orlando Sentinel in February, which involved an adult and three young children treated at local emergency rooms and were not accounted under measles in Florida since residents of other states are not added up into the official report. The results of these investigations raise concerns about undetected or delayed detections in the chain of transmission. At the state level, vaccination coverage's is at 91%, below the 95% target threshold required for herd immunity.
2. [Chicago City](#): Official available information indicates that there have been at least 57 measles cases this year, which accounts for over half of the total cases across the country. In addition, while official figures have not been disclosed, the largest ongoing known outbreak is at the Pilsen migrant shelter which has affected unvaccinated children and adults who have arrived from abroad. This highlights that diseases can further spread among pockets of unimmunized individuals despite overall high levels of measles immunization across the U.S., and that there are continued risks of importation from incoming travellers from countries with high transmission.

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



Other Infectious Disease Outbreaks - Africa

Source: [WHO](#)

El Niño - East Africa

At least 200 people have been killed and many more injured and left homeless as the El Niño weather phenomenon continues to fuel torrential rains, leading to floods and landslides in towns and cities across East Africa. In [Tanzania](#), the deluge had impacted 200,000 people, with 155 dead, 236 injured, and 10,000 homes damaged. A similar number have been impacted in [Burundi](#) since September, and with nearly 100,000 displaced, the country has appealed for international help. [Kenya](#), meanwhile, has deployed its military to rescue victims as rising waters claimed 45 lives and forced 40,000 from their homes.

The current El Niño event developed rapidly mid-last year and, although some experts say it is technically over, its knock-on effects on Africa's rainy seasons are expected to last till the end of June. Its equally destructive twin, La Niña, which is associated with droughts across the Horn of Africa, is expected to develop by August.

Source: [TheNewHumanitarian](#)

Cholera – Africa - External Situation Report 58: 1 April 2024 -

The cholera outbreak in the WHO African Region has affected 18 countries over the last two years. Six countries are categorized as being in acute crisis (Comoros, Democratic Republic of the Congo, Ethiopia, Mozambique, Zambia, and Zimbabwe), though there has been sustained decrease in weekly case incidence in April in Zambia and Zimbabwe. The southern region of the continent, now in the rainy season, is experiencing resurging outbreaks. The southern region of the continent, now in the rainy season, is experiencing resurging outbreaks. The increase in rainfall levels is causing floods and landslides in communities. This raises the risk of outbreaks in countries that have not reported new confirmed cases. The seasonality of cholera outbreaks is an issue for countries to consider. They need to improve preparedness and readiness, heighten surveillance, and scale up preventive and control measures in communities and around border crossings. This will prevent outbreaks, engender early response, and reduce cross-border transmission.

In Epidemiologic week 13 of 2024, seven countries - Burundi, Comoros, Malawi, Mozambique, United Republic of Tanzania, Zambia, and Zimbabwe - reported a total of 1 345 new cases. Transmission is currently active in 13 countries. In 2024, Comoros confirmed an outbreak linked to cross-border transmission.

Since the beginning of the year 2024, the number of cholera cases and deaths reported to the WHO Regional Office for Africa (AFRO) as of 31 March was 62 175 and 1 232 deaths, respectively, with a case-fatality ratio of 2.0%. The Democratic Republic of the Congo, Ethiopia, Mozambique, Zambia, and Zimbabwe account for 94.6% (58 802) of the total cases and 95.7% (1 179) of total deaths this year.

As of 31 March 2024, a cumulative total of 348 609 cholera cases, including 6 342 deaths (CFR: 1.8%), have been reported since 1 January 2022. The Democratic Republic of the Congo, Ethiopia, Malawi, Mozambique, and Zimbabwe account for 73.6% (257 145) of the cumulative cases and 64.1% (4 065) of all cumulative deaths reported.

Source: [WHO](#): Download the [Situation Report 58/2024](#). You can also access the Cholera situation reports archive by visiting the [Cholera Health Topic](#) on the WHO website.

Meningitis – Central African Republic

The Ministry of Health in the CAR officially declared an outbreak of meningococcal W135 meningitis in Batangafo-Kabo health district on 22 March 2024.

In epidemiological week 9 (26 February to 3 March 2024), The chief physician of Kabo Hospital reported six suspected cases of meningitis, all of which resulted in death after 48 hours of hospitalisation. The recorded cases presented various symptoms, including headaches, fever, convulsions, and febrile coma, leading to a diagnosis of febrile meningial syndrome. As of 25 March 2024, 35 suspected cases and nine deaths (CFR: 26.0%) had been recorded in Kabo and Ouaki districts. Kabo district accounts for 97.0% of all cases.

M-pox - Republic of Congo

By the first 13 epidemiological weeks of 2024 (January 1 to March 27), 58 Mpox cases were reported, comprising 30 suspected, 19 confirmed, and nine probable cases. This represents a significant increase in the number of reported cases compared to the same period in 2022 and 2023. Since 2022, a total of 54 confirmed Mpox cases have been recorded resulting in two fatalities, with five cases in 2022, 21 cases in 2023, and 28 cases in the first quarter of 2024. Mpox is non- endemic in the Republic of Congo and its first case was recorded in 2022.

Nine health districts from 5 departments of the country have reported Mpox cases. Of the 58 reported cases, the Cuvette department has reported 74.14% (43 cases), followed by Pointe-Noire with six cases and Likouala with five cases. Cuvette also accounts for the highest number of confirmed cases.

Of 108 confirmed cases, 29% were sex workers (highlighting sexual contact as a key mode of infection), 52% were female, and the median age was 22 years. None of the confirmed cases had been vaccinated against smallpox.

New research released in a pre-print article (awaiting peer review), is reporting on an emerging lineage of Clade I (Clade Ib) in Kamituga, South Kivu Province. The new lineage, Clade Ib, is unrelated to the Clade IIb lineage that was recently associated with the global mpox outbreak which began in 2022. Researchers identified APOBEC3-type mutations in Clade Ib which suggests recent and sustained human-to-human transmission. Researchers have estimated the emergence of this strain to have occurred around mid-September 2023. Clade Ib is capable of evading current testing due to mutations affecting genomic regions targeted by current testing methods for Clade I. Although Clade Ib has only been identified in genomes from human samples from Kamituga to-date, genomic analysis suggests that this lineage likely pre-existed in a local, non-human animal reservoir. Kamituga is a densely populated mining town with a highly mobile population. Miners and sex workers frequently travel to Kamituga to work, including from nearby Rwanda and Burundi. Source: [Paper](#)

Lassa fever - Nigeria

In week 15, the number of new confirmed cases increased from 11 in epi week 14, 2024 to 15. These were reported in Bauchi, Edo, and Ondo States. Cumulatively from week 1 to 15, 2024, 152 deaths have been reported with a case fatality rate (CFR) of 18.3% which is higher than the CFR for the same period in 2023 (17.3%). In total for 2024, 27 States have recorded at least one confirmed case across 126 Local Government Areas.

Sixty-five (65%) of all confirmed Lassa fever cases were reported from these three states (Ondo, Edo, and Bauchi) while 35% were reported from 24 states with confirmed Lassa fever cases. Of the 65% confirmed cases, Ondo reported 25%, Edo 23%, and Bauchi 17%.

Source: [Reliefweb](#), [NCDC.gov](#)

Other Infectious Disease Outbreaks - Africa

Cholera – Mozambique

Mozambique faces a critical humanitarian situation, characterised by security concerns, natural disasters, and disease outbreaks. The country experienced storms and cyclones while recovering from cyclone Freddy which took place from February to March 2023. Since the beginning of March 2024, cyclone Gombe, cyclone Fillipo and the ongoing cyclone Gamane have displaced families and destroyed crops due to resulting floods in southern African countries. The humanitarian efforts in Mozambique have been compounded by the ongoing cholera outbreak in the country that started in Niassa province on 14 September 2022. The country had reported a cumulative total of 45 444 cases, with 169 deaths (CFR 0.4%) in 11 affected provinces as of 03 March 2024. This includes 4 521 cases and seven deaths in 2024 only.

Source: [WHO](#)

Cholera - Burundi

The cholera outbreak that was declared on 1 January 2023 in Burundi continues however with a declining trend. From 1 January 2024 to 26 March 2024, 111 new cases were reported, with no deaths recorded. Cumulatively, 1 481 cases and nine deaths have been reported since the start of the outbreak in week 48, 2022. These cases originated from 12 health districts in five of Burundi's 18 provinces. Recent cases have been reported in Bujumbura Nord, Bujumbura Sud, and Bujumbura Centre districts all in Bujumbura Mairie province, and Kabezi in Bujumbura province. Conversely, the remaining eight districts have not reported any cases in the last two months.

Source: [WHO](#)

Cholera - Comoros

On Feb. 2, 2024, the Ministry of Health of Comoros officially declared an outbreak of cholera following the detection of six cases among the crew and passengers of a boat arriving from Tanzania. The initial cases were identified in the boat's crew and passengers, with a total of 11 imported cases confirmed from Feb. 1-14. The first locally acquired cases were reported from Feb. 4 onwards. Comoros' last cholera epidemic was reported in 2007.

Since the cholera epidemic was declared in Comoros on 2 February 2024, the country has reported 2,319 positive cases and 55 deaths, resulting in a 2.4% case mortality rate. The recent peak occurred last week (Cw17) with 393 cases and 15 deaths. This is compared to no locally acquired cases reported in 2023.

Anjouan Island (1,826 cases) is the most affected, followed by Grande Comore Island (458 cases), and Moheli Island (300 cases).

Local health officials have urged the public to adopt disease prevention measures, including practicing food and water precautions, and regularly washing hands.

Source: [Crisis24](#), [UNICEF](#)

Use of Ebola vaccines – worldwide in 2021–2023

The ICG Ebola vaccine stockpile reached the goal of 500 000 doses in 2022. As of December 2023, it held 518 890 doses. A total of 208 390 (40%) doses in the current stockpile are scheduled to expire in 2024. Doses from the ICG stockpile were first used in 2021 in DRC for outbreak response. The number of doses shipped from the stockpile has increased annually, from 4800 in 2021 to 13 870 in 2022 and 127 020 doses in 2023. During this period, 42 620 doses expired.

Most of the doses shipped (139 120, 95%) were repurposed for preventive vaccination. Five percent (6570) of doses were shipped for outbreak response. DRC has received the largest number of vaccine doses (111 000, 76%), followed by Uganda (23 460, 16%) and Guinea-Bissau (11 170, 8%).

The relatively small number of doses used for outbreak response (6570, 5% of doses shipped) reflects the smaller size and rapid containment of Ebola outbreaks since 2021. North Kivu in DRC has received and administered more doses than any other geographical area worldwide since 2018, which may have contributed to the rapid containment of subsequent outbreaks in that area.

Source: [WHO](#)

Measles - Liberia

The Measles outbreak that started in Liberia in December 2021 continues, although with a declining trend since April 2023. Since December 2022, 4 912 additional suspected cases and 10 additional deaths have been reported. From 13 December 2021 to 6 March 2024, a total of 13 250 suspected measles cases, including 12 596 confirmed (95.0%) and 95 deaths (CFR 0.7%) have been reported.

All 15 counties of Liberia have been affected and cases have mostly been reported from Montserrado (5 456 cases; 41.2%), Maryland (1 214 cases; 9.2%), and Nimba (1 167 cases; 8.8%) counties. The majority of deaths have been

reported from Montserrado (69 deaths; 72.6%). The most affected age group is 2 to 4 years.

From 29 February to 6 March 2024, seven districts in 4 out of the 15 counties of Liberia were in active epidemic phase, namely, Maryland (Plebo, Karluway-II, and Harper), Grand Gedeh (Konobo, Tchien), River Gee (Potupo), and Nimba (Saclepea-Mah).

Source: [WHO](#), [WHO2](#)

Measles - Liberia

Since 2021, Zambia has been grappling with repeated measles outbreaks. Initially concentrated in Lusaka, Northwestern, and Southern Province, the outbreaks have now reached all ten provinces, impacting both urban and rural communities. Predominantly, the affected demographic comprises children under five years old, with 84.0% either unvaccinated or lacking a documented vaccination history against measles.

The cumulative count of suspected cases, has now reached 1 594, and laboratory-confirmed measles cases, totalling 57 since the first week of 2024.

Luapula province which recorded the highest attack rate since the start of the outbreak has seen a declining trend in the past two weeks, from 13.0 to 1.8/100,000 population.

Other Infectious Disease Outbreaks – Middle East/Europe



TheNewHumanitarian: One of the [strongest El Niño events](#) on record is driving climate disasters around the world. Southern Africa is struggling with a drought emergency that has triggered food shortages and appeals for international aid. In [Afghanistan and Pakistan](#), more than 130 people have died in [El Niño-induced pre-monsoon rains](#) that have swept away homes and turned roads into raging rivers. Parts of [East Africa](#) have also suffered heavy flooding, with tens of thousands displaced and authorities in Kenya and Tanzania urging people to move to higher ground. Meanwhile, countries in [East Asia and the Pacific](#) are sweltering under a life-threatening heat wave. Similar high temperatures in parts of [Latin America](#) have triggered power cuts and water rationing. This year's El Niño appears to have ended faster than expected, but experts are now trying [to figure out if a La Niña event](#) will ensue, bringing the likelihood of more extreme storms and hurricanes.

Vaccine-derived Poliomyelitis – Spain

On 25-Mar-2024, the Public Health Agency of Catalunya, Spain reported the detection of a case of vaccine-derived poliomyelitis type 1 (VPD-1) among a two-year-old child who had a travel history to Pakistan at the end of 2023.

The child had previously been vaccinated in Catalunya with three doses of IPV (i.e., was fully vaccinated) at an unspecified date and did not present neurological symptoms compatible with a polio infection. Currently the child is asymptomatic.

On 20-Feb-24, eight samples were collected from the child and close contacts of the child. The reason for sample collection was not well described but is presumed to have been related to the previous illness and clinical findings of bicytopenia. All individuals tested were negative except for the child, who was reported to have had a low viral load. At the same time, samples were collected from wastewater around the patient's home, which all returned negative results, as did the previous and subsequent monthly samplings.

Public Health officials have stated that following official investigations, no secondary cases or risk of transmission has been found to have occurred in the community. Follow-up investigations have concluded.

Sources: [NewsMedia](#), [ASPCAT](#)

Crimean-Congo Hemorrhagic Fever (CCHF) - France

A team of researchers have confirmed the presence of Crimean-Congo hemorrhagic fever (CCHF) virus in ticks (*Hyalomma marginatum*) for the first time in Corsica, a French island in the Mediterranean sea. This follows the first detection of CCHF in mainland France in October 2023 among ticks from cattle farms in the south of France. While to date, no human cases have been detected in France, this event highlights there is a risk of its occurrence.

The virus had been found in ticks collected from cattle from two different sites in southeastern and central-western Corsica which indicates an established circulation of the CCHF virus. *H. marginatum* ticks have been present in Corsica for decades, with first reports as early as 1946.

Given the detection of the CCHF virus in ticks in both Eastern Pyrenees and Corsica, there is a risk of humans contracting the disease in France.

In Spain, where the CCHF virus has been known to be circulating, roughly two to three cases are reported in humans each year with a mortality of around 30%.

Source: [CDC](#)

Cholera – Ukraine

On 03 APR, the advisor to the mayor of Mariupol stated that there have been ~10 cholera cases reported among children across multiple schools in the currently Russian-occupied Mariupol, Ukraine, and there is a great threat that the outbreak could rapidly escalate into an epidemic.

However, the Russian-controlled occupational health ministry has denied that there have been any cases of cholera in Mariupol in 2024. Further, according to a 04 APR Ukrainian press report, the Ukrainian MOH has not detected cholera-like vibrio this year. Cholera surveillance in Ukraine continues year-round, but is intensified from JUN – OCT.

Officials state that rapidly warming weather and the increased concentration of people in the city due to individuals moving to Mariupol, primarily from Russia, have led to additional strain on its infrastructure. Wastewater treatment plants and drainage systems are fragmented, resulting in sewage flowing directly into the Sea of Azov, which may be fuelling the outbreak.

Source: [NewsMedia](#)