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#### News:

- WHO: <u>announced that it has designated NB.1.8.1 as a SARS-CoV-2 variant under monitoring (VUM)</u>, noting that, although proportions are growing rapidly, the virus seems only marginally more immune-evasive than the more dominant LP.8.1 sublineage.
- Johns Hopkins University : produced a <u>new county-level US dataset</u> showing a national decline in the measles, mumps, and rubella (MMR) vaccination rate among children since the start of the COVID-19 pandemic. Across the 2,066 counties in 33 states with both prepandemic and postpandemic vaccination rates, the county-level mean vaccination rate decreased from 93.92% (5.71%) prepandemic to 91.26% (6.95%) postpandemic, a mean decline of 2.67% (5.27%) in 1,614 (78%) of the countries. Only four states out of the 33 included in the study, California, Connecticut, Maine, and New York, reported an increase in county-level vaccination rates for MMR.
- **Macrolide Resistance**: a <u>Lancet study reported that macrolide resistance in *Streptococcus pneumoniae* remained elevated in children in a community in Malawi more than 3 years after they received twice-yearly doses of azithromycin—a macrolide antibiotic—as part of a randomized controlled trial. Migrants were tested for TB, HIV and Hep B and C virus.</u>
- **Migrant Health**: A <u>study from the UK found out that instituting routine testing of migrants</u> for certain infectious diseases leads to earlier diagnoses and treatment, improving health outcomes and lowering the risk of onward community spread. Of 4,004 migrants referred for testing, the test positivity rate was 0.5% for HIV, 3.3% for HBV, 0.2% for HCV, and 19.4% for TB. Among the 437 TB patients, 7% had active disease, and 92% had latent infections. 98% of new latent TB patients were offered drugs to prevent active illness; 94% of them began treatment, and 95% of them completed it. All six newly diagnosed HIV patients, 97% of 71 new HBV patients, and all five new HCV patients completed follow-up.
- **Belgium**: A <u>new analysis published late last week in *Vaccine* concludes that COVID-19 vaccination averted 12,806 COVID-19 deaths among Belgians aged 65 years and older from 2021 through 2023. That represents a 54% reduction in mortality. The authors estimated deaths averted by considering the vaccine efficacy (VE) for each variant of concern (VOC) during the 2-year study period and matching that information with national data on vaccine coverage and the number of reported COVID-19 deaths from the epidemiological surveillance over time. Overall, vaccines averted the highest rate of deaths during the period dominated by the Delta variant, with 68% of deaths averted. Vaccines averted only 31% of deaths during the Alpha period and 54% of deaths during Omicron.</u>
- FDA: approved Moderna's new COVID-19 vaccine. Marketed under the name mNexspike (mRNA-1283), the updated shot targets a portion of the SARS-CoV-2 spike protein for virus neutralization, allowing for a dose that's one-fifth the size of Moderna's original COVID-19 vaccine, Spikevax (mRNA-1273). Company officials have also characterized the updated shot as potentially refrigerator-stable vaccine that could be more easily distributed and administered in a wider range of settings.
- Roche: is <u>planning to launch a phase 3 trial of its novel antibiotic candidate zosurabalpin</u> in patients with carbapenem-resistant *Acinetobacter baumannii* (CRAB) infections.
- **ECDC**: published a <u>public health advice for travellers attending the Jubilee 2025 in Italy</u>. It is expected to attract more than 30 million visitors. The public health advice covers various topics, including guidance on heatwaves and sun exposure, vaccination, food and water safety, vector-borne diseases (such as those transmitted by mosquitoes and ticks), alcohol and tobacco use, and sexually transmitted diseases.

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Figure 2. Word cloud maps of disease name mentions pulled from BlueDot's internal dataset of processed EBS articles between January 1 and December 31 of the noted year. Text colour denotes the geographic region, while the size of text indicates the frequency and listed rank of the disease name for that geographic region. Caveats: Diseases with multiple subtypes, clades, or subcategories have not been grouped together in the above images and disease mentions for some disease for which BlueDot does not actively monitor have been excluded (i.e. AIDS and HIV).

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### **COVID-19 – Global Situation**

Since mid-February 2025, according to data available from sentinel sites, global **SARS-CoV-2 activity** has been **increasing**, with the test positivity rate reaching 11%, levels that have not been observed since July 2024. This rise is primarily observed in countries in the **Eastern Mediterranean**, **South-East Asia**, and **Western Pacific regions**. Since early 2025, global SARS-CoV-2 variant trends have slightly shifted. Circulation of LP.8.1 has been declining, and reporting of **NB.1.8.1**, a Variant Under Monitoring (VUM), is **increasing**, reaching 10.7% of global sequences reported as of mid-May. Recent increases in SARS-CoV-2 activity are broadly consistent with levels observed during the same period last year, however, there **still lacks a clear seasonality** in SARS-CoV-2 circulation, and surveillance is limited. Continued monitoring is essential. As part of comprehensive COVID-19 control programmes, **vaccination remains a key intervention for preventing severe disease and death** from COVID-19, particularly among at risk groups.

#### **Overall COVID-19 Season**

Countries in the African Region, European Region, and the Region of the Americas are currently **reporting low levels** of SARS-CoV-2 activity with percent positivity ranging from 2% to 3%. However, some areas—particularly in the Caribbean and Andean subregions in the Region of the Americas showed increasing trends of SARS-CoV-2 test positivity as of 11 May. Publicly available **wastewater monitoring** data from countries in the European Region and the Northern America subregion **remain low** and, at present, do not indicate any upward trend in SARS-CoV-2 activity as of 11 May 2025.

#### SARS-CoV-2 Variant Evolution and Circulation

SARS-CoV-2 **continues to evolve**, and between January and May 2025, there were shifts in global SARS-CoV-2 variant dynamics. At the beginning of the year, the most prevalent variant tracked by WHO at the global level was XEC, followed by KP.3.1.1. In February, circulation of XEC began to decline while that of **LP.8.1 increased**, with the latter becoming the most detected variant in mid-March. Since mid-April, the circulation of LP.8.1 has been slightly declining as NB.1.8.1 is increasingly being detected.



Figure 2. SARS-CoV-2 Variants of Interest and Variants Under Monitoring proportions from January 2025 to May 2025.

The **most recently** designated **variant under monitoring** (VUM) is **NB.1.8.1**, which is a descendent lineage of XDV.1.5.1. Increased circulation of NB.1.8.1 was detected in **all three WHO regions** that are consistently sharing SARS-CoV-2 sequences, i.e. from 8.9% to 11.7% for the <u>Western Pacific region</u>, from 1.6% to 4.9% for the <u>region of the Americas</u>, and from 1.0% to 6.0% for the <u>European region</u>. There are only 5 NB.1.8.1 sequences from the South-East Asia Region, and none from the African Region or the Eastern Mediterranean Region.

#### **COVID-19 Vaccination Update**

Overall COVID-19 **vaccine uptake** among high-risk groups **remains low**, with significant disparities across regions and income levels. Among older adults, just 1.68% were reported as having received a dose so far in 2024 up to 30 September 2024 across 75 reporting Member States, and among health and care workers, uptake stood at 0.96% across 54 reporting Member States. Uptake was notably higher in the Region of the Americas and the European Region, with older adult coverage reaching 5.1% in the European Region and 3.6% in the Region of the Americas compared to less than 0.5% in other regions. A similar disparity was observed when comparing countries by income level. High and upper middle-income countries (HIC/UMIC) reported higher vaccine uptake among older adults with 4.3% and 1.2% respectively, compared to less than 0.5% in low-income countries (LIC) and lower middle-income countries (LMIC).

#### WHO risk assessment

The **global public health risk associated with COVID-19 remains high**. There has been evidence of decreasing impact on human health throughout 2023 and 2024 compared to 2020-2023, driven mainly by:

- 1. high levels of population immunity, achieved through infection, vaccination, or both;
- 2. similar virulence of currently circulating JN.1 sublineages of the SARS-CoV-2 virus as compared with previously circulating Omicron sublineages; and
- 3. the availability of diagnostic tests and improved clinical case management.

SARS-CoV-2 circulation nevertheless continues at considerable levels in many areas, as indicated in regional trends, without any established seasonality and with unpredictable evolutionary patterns.

Evaluation of the currently predominant VUM, LP.8.1, and the most recently designated VUM, NB.1.8.1, suggests **no increased public health risk posed by these variants** compared to other circulating variants.

To permit robust COVID-19 risk assessment and management, WHO reiterates its recommendations to Member States to continue to monitor and report SARS-CoV-2 activity and burden, public health and healthcare system impacts of COVID-19, strengthen genomic sequencing capacity and reporting, in particular information on SARS-CoV-2 variants [6], promptly and transparently to support global public health efforts.

## **SARS-CoV-2** Variants

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#### Variant Observations and Research Updates

- LP.8.1 has been the dominant variant in many regions in recent months; however, it has been decreasing in prevalence globally since April. Other currently circulating variants NB.1.8.1, LF.7.9, and XFG have demonstrated higher growth advantage compared to LP.8.1.
- XFG the other fastest growing variant globally is a recombinant of LF.7 and LP.8.1, both of which are JN.1 sublineages.
- XEC continues to decrease in prevalence, making up only about 10% of all globally sequenced cases, as of 19-May-2025.
- Other recombinant variants, such as XFX, XEQ, XFJ, and XEK, are also increasing in prevalence, specifically in North America.1 Additionally, MC.10.1.7 (a subvariant of KP.3.1.1) showed a slight increase in Canada recently, specifically in Ontario.<sup>2</sup>
- NB.1.8.1, designated a Variant Under Monitoring by the WHO, is currently the fastest growing variant globally. While it was first identified in Asia and drove COVID-19 waves in the region, it has now been reported in 21 countries globally, in all regions including Europe, North America, and Oceania.<sup>3</sup> As of 23-May- 2025, NB.1.8.1 had not been associated with an increase in disease severity<sup>4</sup>, however, there have been no studies published on the population-level impact of the variant yet.
  - NB.1.8.1 is a sublineage of the tertiary recombinant variant, XDV (tertiary indicates that the variant is a recombinant of a recombinant of a recombinant). While other circulating variants are descendants of JN.1, XDV is a recombinant of JN.1 and other recombinants of previously circulating BA.2 sublineages.



 In a pre-print lab study, XFG and LF.7 demonstrated high immune escape, however XFG displayed low ACE2 receptor binding affinity (i.e., the ability to attach to and enter cells), which may explain why it does not have the highest growth advantage among all circulating variants. In contrast, NB.1.8.1 displayed high immune escape and good ACE2 receptor binding affinity.<sup>5</sup> This indicates that NB.1.8.1 has an advantage and may be able to outcompete other circulating variants.

#### Global COVID-19 Vaccine Recommendations<sup>6</sup>

 On 15-May-2025, the WHO The WHO Technical Advisory Group on COVID-19 Vaccine Composition (TAG-CO-VAC) advised manufacturers that the



monovalent JN.1 or KP.2 vaccines remain appropriate. It was also suggested that a monovalent LP.8.1 is a suitable alternative.

- The team mentioned that based on the data and studies available, the currently approved monovalent JN.1 or KP.2 vaccines continue to elicit broad cross-reactive immune responses to currently circulating variants, most of which have descended from JN.1.
- In April 2024, the TAG-CO-VAC recommended the use of a monovalent JN.1 vaccine, and that recommendation remained steady in December 2024 as well.

Variant	Variant Details	Key Mutational Changes (From JN.1)	Prevalence As of 19-May-2025 (95% CI)	Estimated Growth Advantage (In the past 2 months)
LP.8.1	Sublineage of KP.1.1.3 (a JN.1 FLiRT variant)	<ul> <li>Q493E</li> <li>H445R</li> <li>F186L</li> <li>R190S</li> </ul>	<b>30.0%</b> (17.3 to 46.7%)	<b>-7%</b> (-9 to -5%)
NB.1.8.1	Sublineage of the recombinant XDV.1.5.1	<ul> <li>T22N</li> <li>Q493E</li> <li>A435S</li> <li>V445H</li> </ul>	<b>31.7%</b> (18.6 to 48.4%)	<b>53%</b> (47 to 58%)
XFG	Recombinant of LF.7 and LP.8.1.2	<ul> <li>A475V</li> <li>N487D</li> <li>Q493E</li> <li>T572I</li> </ul>	<b>5.8%</b> (1.6 to 19.0%)	<b>47%</b> (39 to 55%)
LF.7	Sublineage of JN.1.16.1	<ul> <li>S31P</li> <li>K182R</li> <li>N487D</li> <li>R190S</li> <li>K444R</li> </ul>	<b>12.5%</b> (5.1 to 27.4%)	<b>-2%</b> (-5 to 1%)
XEC	Recombinant of two JN.1 sublineages: KS.1.1 and KP.3.3	<ul> <li>T22N</li> <li>F456L</li> <li>Q493E</li> <li>V1104L</li> </ul>	<b>10.4%</b> (3.9 to 24.9%)	<b>-11%</b> (-13 to -8%)

Data Source: cov-spectrum.org and outbreak.info. Source data provided by GISAID.

## **Measles – Region of the Americas**



Pan American Health Organization

Source: WHO, PAHO, CDC, Canada Health, GOB, GOB, GOB BO

As of 18 April 2025, a total of **2318 measles cases, including four deaths**, have been confirmed in **seven countries** in the WHO Region of the Americas, an **11-fold increase** compared to the same period in 2024. The majority of cases have occurred among people between 1 to 29 years, who are **either unvaccinated** or have **an unknown vaccination status**. Additionally, most cases are **imported or linked to importation**.

From 1 January to 18 April 2025, a total of 2318 measles cases, including four deaths, were confirmed in the WHO Region of the Americas, an 11-fold increase compared to the 205 cases of measles reported in the same period in 2024. The cases have been reported from seven countries: **Bolivia** (n=2, as of June 2), **Argentina** (n= 29 cases, as of 26 May), **Belize** (n= 7 cases), **Brazil** (n= 5 cases), **Canada** (n=2429 cases, as of May 24),



Mexico (n= <u>1878 cases including one death</u>, as of May 2), and the **United States of America** (<u>n=1088</u> cases, including three deaths, as of May 29).

#### <u>Argentina</u>

Between 1 January and 05 May 2025, Argentina reported 26 confirmed cases of measles; concentrated mainly in the Autonomous City of Buenos Aires (CABA) and in the Province of Buenos Aires (PBA), with a Figure 2: Geographical distribution of the confirmed cases between 1 January 18 April 2025 higher proportion in the commune 14 of CABA and in specific areas of



PBA. In addition, a case was reported in the province of San Luis, with a history of travel to Mexico. Twelve of the cases were confirmed with genotype B3 identified. One of the imported cases, associated with recent international travel to Thailand, was identified as genotype D8.

#### <u>Belize</u>

On 12 April 2025, the Belize Ministry of Health & Wellness confirmed two positive measles cases—Belize's first since 1991. Both cases were from the Corozal and Cayo districts with no vaccination, and travel history to Chihuahua, México. Despite significant efforts to increase vaccination coverage, Belize remains below the target range of 92-95%. In 2024, Belize reported a country percentage of 83.9% for the second dose of the MMR vaccine.

#### <u>Brazil</u>

Between 1 January and 18 April 2025, Brazil reported five confirmed cases of measles across four locations: Federal District (1), Rio de Janeiro (2), Rio Grande do Sul (1), and São Paulo (1). The two cases in Rio de Janeiro are children under one year of age, both without a history of vaccination. The other cases are adults with a history of international travel.

#### <u>Bolivia</u>

As of 2 June 2025, Bolivia reported two confirmed cases of measles in the city of Santa Cruz. Both are without a history of vaccination.

#### <u>Mexico</u>

As of 30 May 2025, Mexico reported 1,878 confirmed cases of measles in 17 states and 57 municipalities. Most cases are reported from Chihuahua followed by Sonora and Zacatecas.

#### <u>Canada</u>

As of 24 May 2025, Canada reported a total of 2,755 measles cases (2,429 confirmed, 326 probable) by 9 jurisdictions (Alberta, British Columbia, Manitoba, Northwest Territories, Nova Scotia, Ontario, Prince Edward Island, Quebec, Saskatchewan). There is a multijurisdictional measles outbreak ongoing in Canada, 1,867 cases (1,550 confirmed, 317 probable) are linked to this outbreak. Most cases are unvaccinated or of unknown vaccination status. Most are due to genotype D8 and some of B3. Countries of travel for cases exposed outside of Canada include: Cambodia, Czech Republic, England, India, Kenya, Mexico, Pakistan, Romania, South Korea, Uganda, Vietnam.

#### **United States of America**

As of May 29, 2025, a total of 1,088 confirmed measles cases were reported by 33 jurisdictions: Alaska, Arkansas, California, Colorado, Florida, Georgia, Hawaii, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Missouri, Montana, Nebraska, New Jersey, New Mexico, New York City, New York State, North Dakota, Ohio, Oklahoma, Pennsylvania, Rhode Island, Tennessee, Texas, Vermont, Virginia, and Washington.

There have been 14 outbreaks reported in 2025, and 90% of confirmed cases (977 of 1,088) are outbreak-associated. 96% of cases are either unvaccinated or with unknown status. There have been 3 confirmed deaths from measles.

#### WHO Risk Assessment

The **overall risk** of measles in the **Americas Region**, especially in countries with low vaccination coverage, is considered **high**.

The **overall risk at the global level** is assessed as **moderate** due to the ongoing transmission in all the other WHO Regions, where immunization programs in several countries are not at an optimal level

### **Pertussis – Region of the Americas**





In light of the sustained decline in pertussis vaccination coverage, mainly during the COVID-19 pandemic, and in the context of the current global resurgence of pertussis cases—with significant increases in several countries in the Americas Region - Member States of the WHO been asked to strengthen their epidemiological surveillance systems and maintain monitoring of continuous, detailed, and disaggregated vaccination coverage among children.

In the <u>Americas Region Pertussis cases</u>, reached their lowest point with 3,283 cases in 2022, and then in 2023 cases increased to 4,139 cases. Currently, there is a provisional total of 43,751 cases in the Americas Region for the year 2024 (subject to change when all countries report their totals in June 2025).



PAHO; 2025. Unpublished.

#### Vaccination coverage in the Americas Region

During the COVID-19 pandemic, there was a significant decrease in DTP1 and DTP3 vaccine coverage. In 2021, the Americas Region reached its lowest level in two decades, with coverage of 87% for DTP1 and 81% DTP3. However, the 2023 data show a partial recovery with 90% for DTP1 and 88% for DTP3. It is important to note that there are significant disparities between and within countries at the subnational level.

In **Figure 2** the evolution of DTP3 coverage between 2020 and 2024 in the seven countries—<u>Brazil,</u> <u>Colombia, Ecuador, Mexico, Paraguay, Peru, and the United States of America</u>—of the Americas Region that **currently have pertussis outbreaks in 2025** is presented. Four of the seven countries analyzed— Colombia, Ecuador, Paraguay, and Peru—show a decrease in DTP3 coverage in the last year with available data. Although the other countries have increased coverage, this information does not allow to visualize coverage at the subnational level or identify possible immunity gaps in certain age groups, which could help explain the emergence of outbreaks.

#### Summary of the situation of select countries in the Americas Region

#### <u>Brazil</u>

Between EW 1 and EW 19 of 2025, 1,634 confirmed cases of pertussis were reported, including five deaths. It is the second year with the most cases reported in the country since 2019, after 2024.

#### <u>Colombia</u>

Between EW 1 and EW 18 of 2025, 318 confirmed cases of pertussis were reported, including two deaths. The highest number of cases reported in Colombia since 2019 have been reported in 2025.

#### <u>Ecuador</u>

Between EW 1 and EW 19 of 2025, a total of 593 pertussis cases have been reported, including 15 deaths. The number of pertussis cases reported in 2025 is the highest reported since 2002 in the country.

#### <u>Mexico</u>

Between EW 1 and EW 19 of 2025, 943 confirmed cases of pertussis were reported, including 51 deaths, distributed in 31 states of the country. The total number of cases for the year 2025 is the highest reported since 2016 in the country.

#### <u>Paraguay</u>

Between EW 1 and EW 19 of 2025, 37 confirmed cases of pertussis were reported, including two deaths of this total, 33 cases are confirmed by laboratory and four by epidemiological link. The total number of cases for the year 2025 is the highest reported since 2018 in the country.

#### <u>Peru</u>

Between EW 1 and EW 19 of 2025, 404 confirmed and 219 probable cases of pertussis were reported, including 13 deaths. The total number of cases for the year 2025 is the highest reported since 2013 in the country.

#### **United States of America**

Between EW 1 and EW 18 of 2025, 10,062 confirmed and probable cases of pertussis, including five deaths, have been reported. This is the second year with the most cases reported since 2020, after 2024 in the country. Of the states with confirmed and probable cases of pertussis, those with the highest number in 2025 are Washington (n= 1,067 cases), Oregon (n= 723 cases), and California (n= 590 cases).

#### **WHO recommendations**

Strengthen surveillance to monitor disease trends, identify outbreaks, control the burden of disease, and evaluate the impact of the vaccination strategy and control measures implemented. In addition, countries are encouraged to strengthen their laboratory diagnostic capacities.

Source: PAHO

### Yellow Fever – Region of the Americas





From 29 December 2024 and as of 25 May 2025, a total of **235 confirmed human cases** of yellow fever, including **96 deaths**, have been reported to WHO by five countries in the Region of the Americas (case fatality rate (CFR) 41%). The cases have been reported in the Plurinational State of Bolivia, Brazil, Colombia, Ecuador and Peru. The 212 confirmed yellow fever cases reported so far in 2025 represent a **threefold increase** compared to the 61 confirmed cases reported in 2024.

#### Bolivia (Plurinational State of)

Since the beginning of 2025, Bolivia has reported **four confirmed human cases** of yellow fever, including **two fatal cases** (CFR 33%), as of 25 May 2025. The cases were reported in the departments of Beni (one case), La Paz (2 fatal cases), and Tarija (1).



The fatal cases had **no history of yellow fever vaccination**, whereas two cases reported **having been vaccinated**. All three cases had a history of **entering forested areas**. Additionally, an **epizootic event** (death of non-human primates) was confirmed in the municipality of San Buenaventura in the department of La Paz.

#### <u>Brazil</u>

Since the beginning of 2025, Brazil reported **111 confirmed human cases** of yellow fever, including **44 fatal cases** (CFR 40%), as of 25 May 2025. Cases were reported in the states of Minas Gerais (10 cases, including five deaths), Pará (45 cases, including seven deaths), São Paulo (55 cases, including 31 deaths), and Tocantins (one fatal case). **Only one** case had a documented history of **yellow fever vaccination**. All cases reported **exposure to wild and/or forested areas**, either through occupational or recreational activities.

#### **Columbia**

Since the beginning of the yellow fever outbreak in early 2024 through May 2025, a total of **100 confirmed** yellow fever cases, including **44 deaths**, have been reported in Colombia. In 2025, a total of 60 confirmed cases of yellow fever were reported, including 24 deaths, as of 26 April 2025. The cases were residents of the following departments: Caldas (one fatal case), Cauca (one fatal case), Guaviare (one fatal case), Meta (two fatal cases), Putumayo (three cases, including one death), and Tolima (52 cases, including 18 deaths). **All** cases had a history of **exposure to areas classified as at risk for yellow fever**. Only **two** of the confirmed cases had a documented history of **yellow fever vaccination**.

Figure 2: Geographical distribution of confirmed human cases of yellow fever by year, Region of the Americas, 2023-2025, as of 26 April 2025



#### <u>Peru</u>

Until 25 of May 2025, **38 confirmed cases** of yellow fever, including **15 deaths**, were reported in the Departments of Amazonas (23 cases, including eight deaths), Huánuco (one fatal case), Junín (three cases), Loreto (two cases, including one death) and San Martin (nine cases, including five deaths), as of 28 May 2025. All cases had a **history of exposure in wild and/or forested areas**, due to agricultural work activities, and **71.8%** of the cases had **no history of vaccination** against yellow fever.

#### <u>Ecuador</u>

Since the beginning of 2025 and as of 25 May, **eight confirmed** cases including **six confirmed fatal cases** of yellow fever have been reported, from the provinces of Morona Santiago (one fatal case), Sucumbíos (2 cases) and Zamora Chinchipe (five fatal cases). All four cases had a history of exposure in wild and/or forested areas, due to occupational activities.

#### Public health response

The countries have implemented coordination actions to respond to the identified yellow fever cases and outbreaks, focusing on strengthening preventive measures, improving surveillance and implementing vaccination actions.

#### WHO risk assessment

Yellow fever is an acute haemorrhagic disease endemic to, or with endemic regions in twelve countries and one territory in the Americas Region: Argentina, the Plurinational State of Bolivia, Brazil, Colombia, Ecuador, French Guiana, Guyana, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, and the Bolivarian Republic of Venezuela.

The **public health risk in yellow fever-endemic countries** in the Region of the Americas is considered "**high**" based on the WHO Rapid Risk Assessment conducted in February 2025, given the increase in yellow fever cases in the last quarter of 2024 and early 2025.

The occurrence of yellow fever cases **outside of the Amazon basin in Colombia** (Tolima) and **Brazil** (São Paulo) is **concerning**. In the newly affected areas of Colombia, **populations are largely susceptible** in the absence of prior large-scale preventive interventions.

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# Year-to-Year Event-Based Surveillance Overview 2023 & 2024

Event-based surveillance (EBS) is one component of infectious disease surveillance. EBS approaches can utilize a range of sources including but not limited to news media, social media, and anecdotal information. The approach can complement traditional information sources as an early indicator of unusual or notable events, although it is generally considered to represent information which is not structured or standardized and is often subjective in nature.

Overall, in 2023 and 2024 while rank changed for most diseases listed in the top 15, the **specific diseases listed in the top 15 remained the same**. <u>Influenza</u> (referring to human seasonal influenza) remained the **most mentioned disease** in both years, while <u>COVID-19 and dengue</u> maintained **top three status**.

The loss of rank does not necessarily mean the disease was mentioned less, but rather other diseases were mentioned to a greater degree.

#### Europe

- Similar to North America, respiratory viruses received a high degree of online news coverage in Europe, as did the number of rables wildlife/domestic preventative measures and confirmed rables cases in animals.
- The ECDC reported that in 2024, 28 EU/EEA Member States reported 35,212 cases of measles. Of concern was the large outbreak in Romania where 30,692 cases were reported and which led to imported cases in multiple other countries both within and outside of Europe. Of the 23 deaths reported in the region over the same period, 22 were from Romania.<sup>11</sup>

Sante Publique France reported that during the 2024 season there

#### Top 5 Diseases

- Influenza
   COVID-19
   Measles
- 4. Dengue
- 5. Rabies
- were 83 local dengue transmission events recorded in mainland France, mainly in the regions of Auvergne-Rhône-Alpes, Occitania, and Provence-Alpes-Côte d'Azur. These cases marked an increase from the 66 reported during the 2022 season and point to a northward geographic expansion of local transmission. Between 01-Jan-2024 to 17-Dec-2024, France reported 4,694 imported cases of dengue, with 2,120 cases in mainland France and 1,855 of those cases reported from departments where the *Aedes* mosquito vector is known to reside.<sup>2</sup>
- Additionally, lle de France (the region where Paris is located) reported its first locally transmitted case of chikungunya just prior to the start of the 2024 Paris Summer Olympics.<sup>12</sup> At the time there was widespread coverage on the risk of further arbovirus outbreaks given parts of France were experiencing some of the highest surface air temperatures and precipitation on record<sup>13</sup> and was noted for the ideal climate to foster the proliferation of the *Aedes* mosquito species.

#### Diseases Mentions Globally via EBS in 2023 & 2024



Figure 1. The top 15 diseases ranked by number of disease mentions summed from BlueDot's internally processed EBS data for 2023 and 2024. Connecting lines show the change in rank between 2023 and 2024. Caveats: Diseases with multiple subtypes, clades, or subcategories have been grouped together for this visualization. This generalized grouping has been applied to influenza (seasonal), avian influenza (cooncid), malaria, mpox, poliomyelitis, and hepatitis. Diseases which BlueDot does not track (Lan DS), HV, and IPI have not been included.

References: BlueDot internally processed EBS articles

Top 5 Diseases

1. Dengue

5. Zika

2. Influenza

3. COVID-19

4. Chikungunya

#### South & Central America

South and Central America was largely affected by El Niño. El Niño's wetter and warmer climate has positive effects on the proliferation of disease vectors such as mosquitoes.<sup>2</sup> Within the BlueDot dataset this is most apparent not only via the large-scale outbreaks of dengue that make mention of El Niño both in endemic and non-endemic countries, but the concurrent increased mentions of other arboviruses such as chikungunya, and Zika. According to PAHO, the number of dengue cases reported in the Americas during the first half of 2024, exceeded historical annual cases, when compared to all years on record.<sup>9</sup>

- El Niño was not the only contributing factor EBS highlighted other possible factors behind the increased rates of dengue such as the geographic expansion of more severe serotypes, inadequate sanitation processes, and under-resourced health facilities.
- In 2023, Brazil approved QDENGA®, a tetravalent dengue virus vaccine that can be used regardless of previous exposure, in people aged four to 60 years of age.<sup>10</sup>

#### North America

- Respiratory viruses, especially those with seasonality, continued to dominate EBS for North America. Rabies appears on this list due to the high number of articles regarding wildlife/domestic preventative measures and confirmed cases in animals; as well as the first domestic human case in a child in Ontario since 1967 and the first human case in Fresno County, California since 1992 were reported.
- New in 2024 was the increased mentions of dengue. Specifically
  addressing continental US, this included a sizeable increase in the
  number of travel associated cases, rising from 1,890 in 2023 to 3,648
  cases in 2024. While California and Texas reported their first locally
  transmitted cases of dengue in 2023, locally transmitted cases
  continued to occur in California, Texas, and Florida last year, with
  California jumping from 2 cases in 2023 to 18 in 2024.<sup>7</sup>
- 2024 marked the unexpected first detection of highly pathogenic avian influenza (HPAI) A(H5N1) in dairy cattle in the US. This outbreak is estimated to have spilled into dairy cattle herds, presumably from wild birds, sometime between November 2023 and January 2024. Subsequently the novel genotypes B3.13 and later D1.1 caused infections in hundreds of dairy herds across the US, 66 humans (including 1 death), and numerous adjacent domestic and wild species.<sup>8</sup> Furthermore, Mexico reported its first human case of influenza A(H5N2) and in Canada the first severe case of influenza A(H5N1) in a child garnered media attention.

#### Africa

#### **Top 5 Diseases**

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Mpox
 Malaria

Top 5 Diseases

5. Avian Influenza

1. Influenza

3. COVID-19

2. Dengue

4. Rabies

- 3. Cholera
- 4. COVID-19
- 5. Influenza
- attributed to the new mpox variant, clade lb.<sup>3</sup> First detected in the DRC, clade lb in 2024 spread to other countries in Africa (Zimbabwe, Angola, and Zambia), Asia (Thailand, India, Pakistan, and Oman), Europe (Sweden, Germany, the UK, and Belgium), and North America (the US and Canada) through infected travellers. The new clade was noted to be more severe and affect a wider population demographic range than clade II, the driving clade behind the 2022 PHEIC. Sustained local transmission has been reported from African countries such as Burundi, the DRC, Sierra Leone, and Uganda, among others.<sup>14</sup>

In 2024 a new mpox PHEIC was declared, the second of its kind since

2022, the PHEIC declaration followed the rapid surge in cases

- The response across Africa was and continues to be led by the continental coordinated efforts of the relatively new mandate of the Africa CDC, following learnings from peak years of the COVID-19 pandemic. This saw the Africa CDC's first declaration for a Public Health Emergency of Continental Security (PHECS).<sup>15</sup>
- The African region in 2023 had the highest number of disease mentions when it came to cholera and malaria. Both diseases continued to cause large scale and disruptive outbreaks in different parts of the continent in 2024 and have ongoing responses.

# nature

# Plasmodium targets for mosquito-based malaria control

A Harvard University–based team has identified a chemical compound that, when applied to insecticidetreated bed nets, blocks malaria parasite transmission in mosquitoes without contributing to insecticide resistance.

Partly due to widespread resistance of *Anopheles* mosquitoes to insecticides used in long-lasting insecticide-treated nets (LLINs) the once-declining malaria death rates have recently stalled.

To prevent onward parasite transmission even when insecticides lose efficacy a strategy could be to directly kill parasites during their mosquito-stage of development by incorporating antiparasitic compounds into LLINs.

The researchers screened 81 chemical compounds with activity against the mosquito stages of the *Plasmodium falciparum* parasite, which causes malaria. Compounds were added to a dimethyl sulfoxide (DMSO)–acetone solution and directly pipetted onto the dorsal thorax of female *Anopheles gambiae* mosquitoes before infection with *P falciparum*.

The solution helped disrupt mosquito cuticle and enhance compound membrane permeability. Mosquitoes were then given a *P falciparum*–containing blood meal 7 days before the scientists counted oocysts (infectious parasite structures) in the digestive tract.

Twenty-two compounds were active against the early parasite stages in the mosquito digestive tract, preventing infection. After using medicinal chemistry to boost the antiparasitic activity of the most effective compounds, the team produced several endochin-like quinolones (ELQs; smallmolecule antimicrobials that disrupt cellular respiration in parasites) that were active against P falciparum.

The top two compounds killed 100% of the parasites when incorporated and/or extruded into net-like polyethylene (plastic) films at very low concentrations and retained activity for more than 1 year.

The data for sure demonstrated the promise of incorporating ELQ compounds into LLINs to counteract insecticide resistance and to reduce malaria transmission.







### 2023-24 Estimates for Flu Vaccine Efficacy

The US Center for Disease Control and Prevention was able to publish estimated influenza vaccine effectiveness (VE) in California because the California's 2023 mandate required flu vaccination reporting and all flu lab test results to the state immunization information system.

Estimated influenza vaccine effectiveness (VE) in California during the 2023-24 respiratory virus season was **41% against lab-confirmed flu** and **68% against influenza B**, but just **32% against influenza A** and 26% among older adults.

<u>Flu lab test positivity</u> ranged from 1% to 19% per week over the study period. Of the 1.4 million test results, **9% were positive** for flu, of whom **30% were vaccinated against flu** at least 14 days before the test. In total, 73% were influenza A, 19% were type B, and 8% were indeterminate.

Of 7,981 subtyped influenza A results, 84% were H1N1, and 16% were H3N2. The median age was 30 years among flu patients and 43 among controls. Overall, **25% of people had received** the 2023–24 flu **vaccine**, including 19% of flu patients and 31% of controls. Median time since vaccination was 92 days among flu patients, compared with 105 days among controls.

Adjusted VE was 41% (95% confidence interval [CI], 40% to 42%) against confirmed flu and 68% (95% CI, 66% to 69%) against influenza B, falling to 32% (95% CI, 31% to 33%) against influenza A and 26% (95% CI, 24% to 29%) among adults aged 65 and older.

Estimated VE against any flu type was higher among children (53%) than among adults ages 18 to 49 years (42%) and 50 to 64 (30%). Similar patterns by age-group were seen for influenza A (range, 43% among children to 23% in adults 65 years and older) and for influenza B (range, 71% among children to 58% in adults aged 65 and up).

Overall, VE **H1N1 was 44%**, while it was **25% against H3N2**, although the researchers said these **data should be interpreted with caution** because positive type A specimens from patients with severe disease may have been more likely to have been submitted to public health labs for subtyping.

VE was **highest among people with a flu test result 14 to 29 days after vaccination**, at **59%**. Estimated VE was **lower with increasing time between vaccination and testing**: 30 to 59 days (52%), 60 to 89 days (39%), 90 to 119 days (34%), 120 to 149 days (35%), 150 to 179 days (34%), and 180 days or more (23%). Among children 2 to 17 years old, VE for live attenuated influenza vaccine was 45% and 52% for inactivated vaccines. The lower VE estimates with increasing patient age are consistent with those of a meta-analysis of test-negative studies conducted from 2004 to 2015.

Source: Journal of Infectious Diseases

# Other Infectious Disease Outbreaks -Africa



### bluedot

#### **Cholera- Yemen**

As of 27-May-2025, Yemen's cholera outbreak continues to escalate, with confirmed expansion in case numbers and geographic spread, especially in the interim capital, Aden, and surrounding governorates, according to the WHO and the Aden Health Office. This resurgence comes amid the collapse of essential healthcare infrastructure, dwindling international aid, and deteriorating water and sanitation systems.

From 1-Jan to 27-Apr-2025, WHO reported 12,942 new cholera and acute watery diarrhea (AWD) cases and 10 deaths in Yemen. This contrasts with the 29,536 suspected cases reported between mid-March and 25-April-2024. In April 2025, 1,352 cholera and AWD cases and 1 death were reported, marking a 6% increase from March (1,278). Data from the Aden Health Office show a sharp rise since early May, with 40 new cases reported daily, including patients from nearby southern governorates: Lahj, Abyan, and Al-Dhale' (3 of Yemen's 21 governorates).

The International Organization for Migration ceased support to isolation centers over three months ago, leaving local facilities overwhelmed. Healthcare workers are now operating under emergency volunteer conditions, with signs of healthcare system collapse evident. Despite previous WHO interventions and funding from international bodies like KSRelief and the UK's Foreign Office, current assistance is minimal, with only three doctors and nine nurses provided to Aden. A recent joint health census in Taiz Governorate recorded 3,406 disease cases and 7 deaths (cholera, measles, dengue, and others) between January and 21-May-2025. Aden's governor has issued an emergency appeal for immediate intervention, warning of an impending health disaster.

Source: WHO, Reliefweb, WHO

#### Cholera-Sudan

On 29-May-2025, UNICEF issued a public statement warning of an escalating cholera crisis in Khartoum State, Sudan, where over one million children are currently at risk. The outbreak was declared a national epidemic by Sudanese authorities in Aug-2024, with resurgence intensifying in recent weeks.

As of May-2025, more than 7,700 cholera cases have been reported in Khartoum State, including over 1,000 cases in children under five. At least 185 deaths have been confirmed. The outbreak has worsened rapidly, with daily case counts surging from 90 to 815 between 15 to 25-May-2025, marking a nine-fold increase in ten days. On 28-May-2025, state authorities **confirmed 1,375 new infections and 23 deaths in a single day**. Since January 2025, over 34,000 people have returned to Khartoum State amid ongoing conflict, often settling in areas with collapsed health, water, and sanitation infrastructure. Jebel Awlia and Khartoum are also experiencing famine-like conditions. They host 33% of the state's estimated 307,000 severely malnourished children, 26,500 of whom suffer from severe acute malnutrition.

Source: WHO, UNICEF, UN, NewsMedia

#### Chikungunya - La Réunion and Mayotte

Since August 2024, widespread transmission of chikungunya virus disease has been documented in La Réunion as well as increasing locally transmitted cases in Mayotte. In <u>La Réunion</u>, **over 47 500** cases and twelve associated deaths have been reported as of 4 May 2025, with sustained high transmission across the island. Over the course of the outbreak, 12 deaths that occurred between 9 March and 27 April in people over 70 years of age with comorbidities were classified as linked to chikungunya, and additional twenty-eight deaths are currently under investigation for chikungunya, including one neonatal death. Furthermore 66 sever cases, defined as those with at least one organ failure, have been reported.

In <u>Mayotte</u>, as of 30 May 2025, a total of 560 chikungunya cases have been reporte. The first imported case was identified on 5 March in the Northeast of the Island and marks the first locally transmitted chikungunya cases since the 2005–2006 outbreak. The virus is present in all regions, with cases primarily in the northeast. **Source:** <u>WHO</u>, <u>sante.fr</u>, <u>sante.fr</u>, <u>sante.fr</u>

#### Diphtheria - Nigeria

On 26-May-2025, authorities in Aboh Mbaise Local Government Area (LGA), Imo State, Nigeria, reported an outbreak of diphtheria in the Mbutu Community, resulting in the deaths of multiple children. In response to the rapid progression of the outbreak, the local government announced the immediate closure of all schools in the area. The number of confirmed fatalities has not yet been officially disclosed.

As of 9-Mar-2025, Nigeria has reported 25,812 confirmed diphtheria cases and 1,319 deaths out of 42,642 suspected cases since week 19 (14-May-2022) across 36 states and the Federal Capital Territory (FCT), involving 184 LGAs in 26 states. Earlier in 2025, diphtheria outbreaks were also confirmed in Lagos State and Zaria (Kaduna State).

Source: <u>NewsMedia</u>, <u>lagos.gov</u>, <u>ncdc.gov</u>

#### Sudan virus disease - Uganda - Declaration of outbreak ending

On 26 April 2025, the Ministry of Health (MoH) of Uganda declared the end of the Sudan virus disease (SVD) outbreak after two consecutive incubation periods (a total of 42 days) since the last person confirmed with SVD tested negative for the virus on 14 March 2025. A total of 14 SVD cases (including 12 confirmed cases and two probable cases) including four deaths (two confirmed and two probable) have been reported during this outbreak.

Source: <u>WHO</u>

#### <u> Malaria – Namibia</u>

On 03-May-2025, Namibia launched an urgent public health response following a significant malaria outbreak. The Ministry of Health has confirmed that the majority of infections are due **to local transmission**. Since the start of the malaria season in December 2024, Namibia has reported 56,130 malaria cases and 95 deaths. This is much higher than 12,000 cases and 28 deaths reported in the whole 2024.

Source: NewsMedia

# Other Infectious Disease Outbreaks -Africa



#### Mpox Clade II - Sierra Leone – UPDATE -

On 14-May-2025, the Africa CDC highlighted a continued escalating mpox outbreak in Sierra Leone, emphasizing it has become a major concern for West African regional health security. A total of 611 mpox cases were reported in Sierra Leone during the most recent week, representing a sharp increase from 483 cases the previous week. This is a 75% weekly increase. Official data indicates that there are roughly **100 mpox new cases daily**. As of 14-May-2025, there have been 2,045 mpox cases and 11 deaths. Sierra Leone accounted for 58.2% of all mpox cases reported in Africa last week.

The **outbreak is mostly driven by Clade IIb** (the same strain that was responsible for the 2022-2023 global outbreak, the first PHEIC mpox declaration); however, there is no specified information on the mpox lab-confirmed cases. The outbreak is concentrated in six districts within the West Urban Area and West Rural Area, which includes the capital city of Freetown. Seven percent of the illnesses are in people who have HIV, a high-risk group seen in other African countries during the outbreak.

The country has **only 60 mpox isolation beds**, and most of the patients are receiving home care, which makes it difficult to ensure compliance with isolation.

Africa CDC has stressed that while testing coverage and testing rates remain strong, contact tracing is limited, with only an average of two contacts identified per case. Over 30,000 individuals have been vaccinated in the past two weeks in Sierra Leone, 60% of which are healthcare workers. Other target groups include contacts of patients and people in high-risk areas.

Africa CDC stresses the need for **proactive immunization in endemic regions** to mitigate the **risk of new variants emerging from zoonotic spillover** or ongoing human-to-human transmission. **Source:** CIDRAP,

#### Mpox Clade I - Togo

On 16-May-2025, the Togolese Ministry of Health confirmed the country's **first officially reported case** of mpox. A second case, a lose contact to the index case, was confirmed the next day. The index case was a 22-year-old woman residing in the Gulf Health District in Lomé, the capital and largest city in Togo. She is currently hospitalized in a specialized infectious disease unit where her condition is being closely monitored.

#### Source: NewsMedia, Beacon

#### Mpox - Ethiopia

On 25-May-2025, the Ethiopian Ministry of Health and Ethiopian Public Health Institute confirmed the country's **first mpox case**. The case is a 21-day-old baby boy'from Moyale City in the south of the Ethiopian Oromiya Region. Additional testing has confirmed the baby's mother was exposed to the virus. The baby's father is reported to have recent travel history to a neighbouring country (it has not been described if this an mpox affected neighbouring country). Both mother and baby are receiving medical care in an isolation ward at a health facility and are in good condition.

#### Mpox - Ghana

Mpox cases are rising in Ghana. The Ministry of Health reported the new cases on 3-Jun-2025 via its Facebook page, with no associated deaths to date. Two patients are currently hospitalized and receiving medical treatment. The increase in cases has been linked to **enhanced surveillance and strengthened contact tracing** efforts nationwide.

**African Region** 

#### Source: NewsMedia, African CDC

#### Measles - Morocco

The outbreak of measles in Morocco continues to escalate. Official information from the WHO indicates that despite Morocco's historic progress toward measles elimination, recent sustained transmission has affected all 12 regions of the country, with cases particularly concentrated among unvaccinated children. In response, national authorities launched extensive public health measures, including a large-scale catch-up vaccination campaign and the activation of emergency response coordination mechanisms.

From 1-Oct-2023 to 13-Apr-2025, more than 25,000 suspected measles cases were reported across Morocco, including 3,706 laboratory-confirmed cases and 184 reported deaths. Children under 18-years-old accounted for 68% of reported cases, while 49% of all cases occurred among unvaccinated individuals. Genotyping of circulating strains revealed exclusive transmission of measles genotype B3, common in Africa and linked to global outbreaks. A single case of genotype D8 was identified, indicating sporadic importation with no sustained local transmission. The vaccination 95% elimination threshold was not met in the past three years, contributing to the current outbreak. A nationwide catch-up campaign was launched in March 2024, initially targeting children under 6, and later expanded to include all individuals under 18. As of 25-Apr-2025, 10.74 million children's vaccination status had been verified, with coverage rates of: 73.6% for MMR, 61.8% for diphtheria-tetanus-pertussis (DPT), and 57.7% for oral polio vaccine (OPV).

#### Source: WHO DON

#### Malaria - Madagascar

Media reports from the Ikongo district in southeastern Madagascar are warning of a **rapidly worsening** malaria epidemic with deaths reporting across entire families in the region. Reports highlight the surge in cases and deaths in the commune of Ambatofotsy, with local authorities and health officials working urgently to respond. There is minimal information about the precise number of cases and deaths. Initial indications of the outbreak were reported in April 2025, with cases steadily increasing in the commune of Ambatofotsy, located in the Fitovinany region within the Ikongo district in the central highlands. Limited data collected suggests a **high positivity rate**: 160 positive tests out of 200 conducted over an unspecified timeframe. As of 27-May-2025, approximately 20 deaths have been reported in the community. The individuals reporting **severe symptoms**, including unconsciousness, diarrhea, and jaundice following death shortly after the onset. The village chief of Mahasoa, Jean Bosco Telolahy, described **multiple daily fatalities**, with entire families being affected. Health authorities have confirmed that most of the deceased did **not seek medical care**, relying instead on traditional treatments, which could be contributing to the outbreak's intensity and the high number of deaths.



# Other Infectious Disease Outbreaks – Europe

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#### Measles – Ukraine

On 14-May-2025, Ukraine's Public Health Center, under the Ministry of Health, prompted national concern due to a significant reported resurgence of measles. The epidemic situation is worrisome due to outbreaks affecting multiple western and southern regions, and associated fatalities reported among unvaccinated or medically vulnerable children. There have been 472 confirmed infections in the first guarter of 2025. This marks a 20.5-fold increase compared to the same period in 2024, continuing a trend that began in 2023. The largest clusters of cases in 2025 have been reported in Zakarpattia, Chernivtsi, and Odessa regions. Two child fatalities have been confirmed in 2025: A 10-year-old in Chernivtsi region (February), who was unvaccinated and had severe comorbidities, and a 9-month-old in Odessa region (April), who also had underlying conditions. In Chernivtsi, only 76.5% of eligible children received measles vaccination in 2024, far below the recommended target. A measles outbreak had been reported in the Izmail district of Odessa, indicating local transmission.

Source: UNICEF, NewsMedia, NewsMedia

#### Borna Disease - Germany

At the end of May, two people contracted the rare Borna virus in the town of Pfaffenhofen an der Ilm in Upper Bavaria. One man has now died because of the infection, while another is battling the virus in the intensive care unit. According to the information provided, both men are in their mid-50s and not related to each other. It is still unclear whether there is a connection between the two.

According to the RKI, up to seven people across Germany contract the Borna virus every year. The majority of cases come from Bavaria: in the past, there have been deaths following infection in other Bavarian districts. Nevertheless, the risk of infection with the Borna virus is also extremely low in Bavaria, according to experts.

Source: BNITM, NewsMedia, NewsMedia

#### Hepatitis A – Czechia

At the end of March, the State Institute of Public Health (SZÚ) warned that cases of infectious jaundice were increasing significantly in the Czech Republic. 450 cases and six deaths from hepatitis A were reported in the first four months of 2025, compared with 636 cases and two deaths all of last year. Because of asymptomatic people, and the long incubation period the number of infected people is likely much higher. The most reported cases are in the Central Bohemian Region - 87, Moravian-Silesian Region - 83, and Prague - 73. Source: SZU, Outbreak News, NewsMedia

#### Chikungunva - France

In 2025, France is observing a substantial increase in imported chikungunya virus (CHIKV) cases, prompting increased vigilance among healthcare professionals with the onset of mosquito season. 950 imported cases have been overall reported as of 22 May in France. The number of imported cases reported in 2025 surpass annual totals in 2024 when less than 30 travel-related cases were reported. Source: NewsMedia, NewsMedia

#### West Nile - United Kingdom

On 21-May-2025, UK authorities reported the first detection of West Nile virus (WNV) RNA in mosquito populations in the United Kingdom. It marks the first recorded occurrence of WNV in British mosquito populations and signals potential early-phase enzootic transmission within the UK.

#### Source: Gov.uk

#### Acute Flaccid Myelitis - Russia

Acute Flaccid Paralysis (AFP) cases were detected in children in Central Russia in 2024, none linked to poliovirus. The three AFP cases were registered in 2024 across the districts of Bogorodsky, Balakhna, and Lyskovsky.

#### Source: NewsMedia

#### Measles - Netherlands

On 21-May-2025, the province of Zeeland reported its first officially confirmed measles case since 2013. The affected individual is a school-aged child in the De Griffioen district in Middelburg with an unknown vaccination status. Zeeland has the lowest provincial vaccination rate nationally, with some parts of the province only reaching 62 percent.

In the Netherlands, measles activity remains elevated with multiple measles clusters reported across various Municipal Health Services (GGD) regions.

#### Source: RIVM.nl

#### **Measles - Belgium**

On 3-May-2025, the Flemish Department of Public Health reported a significant surge in measles cases in the Flanders region of Belgium. In April alone, the number of cases recorded in this region has surpassed the combined total reported during the first three months of the year.

In April 2025, 48 measles cases were reported in Flanders, representing a 306% increase when compared to monthly data. This is the highest monthly figure since March 2011, which recorded 60 cases. The cumulative total for 2025 stands at 95 cases, approaching the 123 cases recorded in all of 2024. The province of Antwerp has been identified as the epicenter, with 60 confirmed cases, of which 47 were unvaccinated. Source: NewsMedia

#### **Measles - France**

In early 2025, French health authorities reported a resurgence of measles, raising concerns due to its wide geographic spread, the severity of the cases, and clear signs of ongoing community transmission. The outbreak has caused clusters in multiple regions, affecting people of all ages and revealing significant gaps in population immunity. By early May 2025, France has reported 427 confirmed measles cases, almost as many as the 483 cases recorded throughout all of 2024. The 427 confirmed cases occurred across 60 departments (administrative regions), representing 59.4% of all departments in mainland France.

Source: WHO, MesVaccins

# Other Infectious Disease Outbreaks – Middle East

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#### Middle Eastern Respiratory Syndrome (MERS) - Saudi Arabia

On 21-Apr-2025, the Ministry of Health (MoH) of the Kingdom of Saudi Arabia (KSA) reported additional **laboratory-confirmed cases and deaths** of MERS-CoV infection occurring between 1-Mar and 21-Apr-2025.

Cases including a cluster of **seven cases in Riyadh included six healthcare workers** who acquired **nosocomial** infection from a single index patient. And two non-cluster cases included one individual with **indirect camel contact** and another without known exposure to animals or animal products. Two of these cases died. These cases show that the virus continues to pose a threat in countries where it is circulating in dromedary camels and spilling over into the human population.

Source: WHO DON

#### Cholera - Israel

On 26-May-2025, the Israeli Ministry of Health confirmed three cases of cholera, the first in the country in several years. Two Israeli individuals contracted cholera **during recent travel to Ethiopia**, which is currently experiencing a significant cholera outbreak affecting multiple regions across the country. A third individual, residing in the Haifa area, became infected after **consuming well water brought from Ethiopia** by one of the initially infected travelers. The incident has raised renewed concern regarding travel-related transmission and the importance of water safety and hygiene measures.

Source: NewsMedia

#### **Poliomyelitis in Pakistan**

**Wild poliovirus has re-emerged in Gilgit-Baltistan, Pakistan**, ending the administrative region's eight-year polio-free status. This indicates further spread within Pakistan, where wild poliovirus type 1 (WPV1) remains endemic and can lead to severe outcomes, particularly in unvaccinated children. There have been 11 human cases of WPV1 since the beginning of 2025. Most cases this year have been reported from the provinces of Khyber Pakhtunkhwa with five cases and Sindh with four cases. Punjab and Gilgit-Baltistan have reported one case each.

#### Measles - Afghanistan

On 14-May-2025, the WHO reported a **substantial surge in communicable disease cases across Afghanistan** in April 2025. Of particular concern is a sharp rise in measles infections in April compared to March. 18,703 cases and 111 deaths were reported in April, representing a **43.4% month-over-month increase**. There are limited details about other epidemiological factors in the outbreak, such as age, gender, vaccination status among the affected. However, the report also highlighted that the spike in measles is occurring alongside other significant outbreaks of **acute diarrhea, pneumonia**, and **vector-borne diseases**, such as dengue fever, malaria, and Crimean-Congo hemorrhaghic fever (CCHF). Healthcare professionals in Afghanistan warn that these increases reflect gaps in healthcare service delivery, particularly in remote and rural regions.

The recent halt in international aid, including from the United States, has led to the **closure of numerous healthcare facilities** across Afghanistan, particularly in remote areas. Vaccine hesitancy remains a barrier to control efforts, especially in rural regions where public mistrust and poor hygiene practices persist. Afghanistan's health infrastructure remains fragile due to decades of conflict, political instability, and underfunding.

# Other Infectious Disease Outbreaks – Americas



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#### Pertussis - Peru

Peru is experiencing a substantial increase in national pertussis cases compared to previous years. Loreto, one of the largest but sparsely populated regions in the country, is reporting more than 73% of cases. Overall, there have been 642 cases this are three times greater numbers than the 2024 cumulative cases. The top five departments repoting are: Loreto: 433 reported cases, Lima: 46 reported cases, Cusco: 22 reported cases and Callao: 19 reported cases. 21 out of 35 public health departments have reported at least one pertussis case.

According to information for the Ministry of Health, vaccination coverage in 2024 for a third dose pertussis containing vaccine is insufficient (below 95%) in most regions in Peru with the exception of Callao and Tumbes. The remaining departments reported coverages between 70 to 90%. Source: gop.pe, NewsMedia, gop.pe

#### Oropouche – Chile

On 17-May-2025, the **first confirmed case** of Oropouche virus disease was reported in Chile. The affected individual is reported to be a young adult who visited Brazil for 10 days. Blood samples revealed an infection with the Oropouche virus (OROV) which was later confirmed by the Public Health Institute.

#### Source: <u>Health Institute</u>

#### <u>Oropouche – Brazil</u>

In a follow-up on the Oropouche virus (OROV) outbreak in Brazil, there has been an **increase of 56%** since the beginning of 2025 (n=10,076 cases) when compared to the same period in 2024 (n=6,440 cases). This is aligned with a recent increase in the number of exported cases in countries such as Uruguay, and Chile. While historically OROV infections have been considered mild, there is **new and growing evidence of severe outcomes**, including vertical transmission leading to stillbirth, detection of the virus in semen, and deaths reported during the 2024-2025 outbreak.

Four total, of which three deaths were confirmed, there is no documented human-to-human transmission of OROV at this time.

The exportation of cases suggests that the outbreak in Brazil is impacting other countries regionally, and that there is high local transmission.

#### Source: NewsMedia, NewsMedia

#### Oropouche – Uruguay

The Ministry of Public Health (MSP) of Uruguay reported the detection of the **first laboratory-confirmed imported cases of Oropouche fever** in the Montevideo Department. The affected individuals had a recent history of travel to Brazil, the epicentre of the outbreak. All three cases were detected in the Montevideo Department, the capital and largest city of Uruguay. Source: Outbreak News Today

#### Yellow Fever in Colombia

On 8-May-2025, researchers from the University of Wisconsin, in collaboration with the National University of Colombia and Abbott's Pandemic Defence Coalition, released findings highlighting **potential viral evolution in yellow fever virus strains** in the Colombian Amazon. The data emerged from a field investigation following a confirmed case in Leticia, capital of the Amazonas department, where genomic sequencing **suggested reduced vaccine susceptibility**.

The study emphasizes the urgent need for heightened genomic surveillance and public health awareness in endemic zones.

The study conducted by experts from the University of Wisconsin in collaboration with the National University of Colombia and the Abbott Pandemic Defense Coalition, has been reported in the media, but so far, it has not been published in indexed scientific journals.

#### Yellow Fever in Ecuador

On 24-Apr-2025, the Ministry of Public Health (MSP) of Ecuador confirmed the country's **first indigenous (locally acquired) case of yellow fever since 2017**, detected in the Amazonian province of Zamora Chinchipe. By 28-Apr-2025, three additional non-imported cases were confirmed, prompting heightened epidemiological surveillance and emergency response measures.

The index case is a 26-year-old man from Loja province who had been working in mining operations in the Amazon. He was initially misdiagnosed with dengue due to overlapping early-stage symptoms and died on 25-Apr-2025. As of 28-Apr-2025, four confirmed cases of yellow fever (YF) have been reported in Ecuador, including one death. All individuals were **exposed in sylvatic (jungle) areas**, and no secondary transmission has been reported among close contacts. Source: NewsMedia, NewsMedia

ource: <u>Newswiedia</u>, <u>Newswiedi</u>

#### Pertussis in Ecuador

As of 01-May-2025, Ecuador is experiencing a **substantial increase** in pertussis activity, with over 300 cases and 10 deaths reported this year. The number of cases reported is more than double the total from 2024. 17 out of Ecuador's 24 provinces have reported at least one pertussis case. Geographically, the most affected provinces are clustered along the northeastern coast of the country. Ecuador reports a high vaccine coverage, with national estimates over 95% for the third dose in 2023. However, vaccination rates are lower according to WHO/UNICEF estimates, with a coverage of 74% for the first dose and 70% for the third dose. Routine childhood vaccination in Ecuador utilizes a whole-cell pertussis vaccine, rather than the acellular pertussis vaccine.

# Other Infectious Disease Outbreaks – Americas/Oceania

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#### Lyme disease – Canada

On 14-May-2025, public health authorities in Quebec reported early season figures indicating sustained high levels of Lyme disease transmission across several regions of the province.

According to data obtained from the Ministry of Health and Social Services (MSSS), 61 cases of Lyme disease were confirmed between 01-Jan and 14-May-2025, closely matching the 68 cases recorded over the same period in 2024. The most affected regions include; Eastern Townships with 26 cases, Outaouais with 12 cases, and Montérégie with 9 cases.

In 2024, Quebec recorded its highest annual number of Lyme disease cases to date, with 834 confirmed cases, up from 652 in 2023, and 586 in 2022. **Early tick activity** has been noted, with bites occurring earlier in the season compared to previous years.

The **geographic range** of *Ixodes scapularis* is **expanding northward** due to climate change, with confirmed tick activity and possible infections reaching more northern regions such as Saguenay–Lac-Saint-Jean and Abitibi-Témiscamingue. There are **challenges in healthcare system preparedness** in newly affected areas, with under-diagnosis and delays in preventive treatment being reported. Source: NewsMedia,

#### **Histoplasmosis - United States**

On 15-May-2025, the US CDC reported on a 2024 histoplasmosis outbreak involving an extended family with a travel history to Costa Rica in December, where they **toured a cave** linked to a previous histoplasmosis outbreak. On 17-Jan-2025, the US CDC was notified of a histoplasmosis outbreak affecting 12 members of an extended family (six adults and six children) from households in Georgia, Texas, and Washington. Four family members received fungal antigen testing, and two received test results positive for *Histoplasma capsulatum* species complex.

#### **Pertussis - United States**

As of April 2025, the United States is experiencing a significant resurgence of pertussis (whooping cough), with nationwide cases already doubled compared to the same period in 2024. In Texas, the situation is especially alarming, as the state faces a steep rise in pertussis cases alongside its worst measles outbreak in more than three decades. This dual surge in vaccine-preventable illnesses is raising serious concern among public health experts.

As of 19-Apr-2025, 8,485 pertussis cases have been reported nationally; this is a 99% increase compared to the 4,252 cases reported at the same time in 2024.

Source: CDC, NewsMedia, NewsMedia

#### Dengue - Australia

A locally acquired case of dengue virus infection has been reported in Cairns. This is the **first locally acquired case reported in the city in seven years**. Historically, Cairns used to experience yearly dengue outbreaks, including one in 2008-2009 which involved almost 1,000 cases. However, since 2011, local transmission of the dengue virus was eliminated following the release of dengue-resistant mosquitoes. However, in January 2025, Townsville recorded its first locally acquired case in five years and a cluster of cases were detected in March.

Source: <u>NewsMedia</u>, <u>NewsMedia</u>

#### Mpox Clade I - Australia

On 15-May-2025, Australia confirmed the first imported case of mpox clade Ib in the country. The affected individual has been described as an adult male traveller with recent travel history to Thailand. Health authorities state that the risk of community transmission from this case is low and the situation continues to be monitored.

Source: ACDC

#### Vaccine-derived Poliomyelitis - Papua New Guinea – Environmental Samples -

On 15-May-2025, the WHO declared an outbreak of vaccine-derived poliovirus (VDPV) in Papua New Guinea (PNG) following the detection of VDPV-2 in **multiple environmental and stool samples**. The detection has triggered a coordinated public health response supported by WHO, UNICEF, and the Australian government. The outbreak was identified during routine screening after VDPV-2 was detected in stool samples from two healthy, vaccinated children in the city of Lae. VDPV-2 was also detected in wastewater samples collected during environmental surveillance in Port Moresby, the capital city. These detections confirm community transmission of the virus in urban centers, although no clinical cases (paralysis or symptomatic illness) have been reported to date. Vaccination coverage in PNG remains **below 50%**, with some areas as low as 8%. Source: WHO DON

#### Dengue - Tonga

On 24-Apr-2025 and 25-Apr-2025, the Tongan Ministry of Health confirmed two dengue-related deaths at Vaiola Hospital. These mark the **first fatalities in the country's ongoing outbreak**, which has recorded nearly 600 cases since February 2025. The outbreak prompted the activation of national public health emergency protocols and raised concerns over a possible shift in circulating dengue serotypes. Source: NewsMedia

# Other Infectious Disease Outbreaks – Asia

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#### <u>Avian Influenza A H9N2 – China – Human Cases -</u>

On 14-May-2025, the Centre for Health Protection (CHP) in Hong Kong reported **eight new human cases** of avian influenza A(H9N2) from Mainland China, of which seven are children, in its weekly avian influenza update. These cases contribute to a growing number of sporadic zoonotic H9N2 infections in the region. There is no information about the source(s) of the infection for any of the cases.

H9N2 continues to be **the most detected avian influenza virus subtype in human infections in China**, usually resulting in mild illness. Most cases are detected through influenza-like illness surveillance or during hospitalization for other respiratory conditions.

Avian influenza A(H9N2) is an endemic low pathogenic virus in poultry across much of Asia, the Middle East, and North Africa, with sporadic zoonotic transmission to humans. The majority of confirmed human cases have occurred in China, where over 100 infections have been reported since 2015. To date, no sustained human-to-human transmission has been observed.

Though **individual case severity remains low**, H9N2 is a virus of pandemic concern due to its frequent reassortment with other avian influenza subtypes, acting as an **internal gene donor to more virulent strains** like H5N1 and H7N9.

#### Source: CIDREP

#### <u>Nipha – India</u>

On 08-May-2025, a case of Nipah virus infection was confirmed in Kerala, India. This represents the **first Nipah virus case reported in India in 2025**. The exact source of the infection remains unknown.

Two other family members are reportedly developing similar symptoms as the index case. Although they had no known exposure to bats or contaminated fruit (common transmission pathways), the family mentioned the recent death of hens in their household, now under investigation as a possible link.

This is the third confirmed Nipah virus case in Malappuram district. Two fatal cases were reported in July and September of 2024. Since 2018, five Nipah outbreaks have been reported in Kerala, including 28 cases and 22 related deaths.

#### Source: NewsMedia, NCDC

#### Highly Pathogenic Avian Influenza A H5N1 - Bangladesh

Genomic information confirms that the recent reported human case in Bangladesh is associated with the predominant circulating clade in the area (clade 2.3.2.1a). This updates prior reporting that described this event as belonging to a clade that is far less common in the last decade. Additionally, a second influenza A(H5) sample of the same predominant clade was recently submitted to GISAID. The sample was from an individual in Jashore District, Bangladesh collected in February. Source: GISAID, Science Direct

#### Avian Influenza A H10N3 - China – Human Case -

On 14-May-2025, the CHP in Hong Kong released an avian influenza report that included a **newly confirmed human case of avian influenza A(H10N3)** in Mainland China. This represents the **fifth confirmed human case** of H10N3 since the first historical confirmation in humans in 2021. The case was. These suggest **possible localized zoonotic transmission**, and/or ongoing increased surveillance in poultry populations. The H10N3 virus remains a **rare zoonotic subtype**, and **no evidence of human-to-human transmission** has been reported to date. Source: CIDRAP

#### Measles – South Korea

According to news media, measles activity in South Korea has reached a **six-year high in 2025**, with 52 confirmed cases. A number of cases have been **linked to recent international travel** and highlights the ongoing transmission risk due to elevated activity regionally. The number of locally acquired cases this year **remains low** compared to last year (35% in 2025; 65% in 2024). South Korea has been considered measles-free since 2014. Measles cases in the last decade in the country have been limited, ranging between two to 442 cases. The most recent epidemic was observed in 2019 with 194 cases.

Historically South Korea has maintained a high childhood vaccination coverage (+95%). WHO/UNICEF's 2023 estimates show 97% coverage for the first measles-containing vaccine dose and 96% for the second dose.

Source: <u>NewsMedia</u>

#### Poliomyelitis - Pakistan

In May the Regional Reference Laboratory for Polio Eradication at the National Institute of Health has confirmed two new cases of wild poliovirus in District Lakki Marwat and District Bannu, South Khyber Pakhtunkhwa. This brings the total number of confirmed polio cases in Pakistan in 2025 to 10—five from Khyber Pakhtunkhwa, four from Sindh, and one from Punjab. Still certain areas—particularly in southern Khyber Pakhtunkhwa—continue to face challenges such as restricted access and difficulties in conducting house-to-house vaccination campaigns. Polio teams in Pakistan have frequently been targeted in deadly attacks, particularly in remote or conflict-affected areas.

In June 2025, the country confirmed its 11th case of wild poliovirus this year in a child from the northern Gilgit-Baltistan region. The announcement came shortly after the conclusion of Pakistan's third nationwide polio vaccination campaign of the year, which began on 26 May and ended on Sunday. The campaign reached over 45 million children under the age of five across 159 districts, including many considered high-risk for the virus. The virus remains a threat in Pakistan, which registered 74 cases in 2024 alone.

Source: GPEI, OutbreakNewsToday, NewsMedia

# Other Infectious Disease Outbreaks – Asia

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#### Anthrax - Thailand

In early May 2025, Thailand reported four cases of cutaneous anthrax in the Don Tan district, Mukdahan province, which borders the Lao People's Democratic Republic. One of the affected individuals died as a result of disease complications, while the remaining three cases were hospitalized and received appropriate medical care. All reported cases had direct contact with cattle suspected to be infected with anthrax. All potentially exposed individuals were identified, and all high-risk contacts received post-exposure prophylaxis. On 28 May, an additional case was announced who was associated with the slaughtering of cattle.

Between 1992 and 2000, the incidence rate in Thailand for anthrax in humans ranged from 0.02 to 0.17 per 100 000 population, with most cases reported in provinces bordering the Lao People's Democratic Republic and Myanmar.

Source: WHO

#### Chikungunya - Sri Lanka

Recent genomic findings highlight that the 2025 chikungunya virus in Sri Lanka harbours **unique mutations that may help it spread more easily and evade the immune system**. Some of the protein changes seem to make the virus better **adapted to mosquitoes that live in cities**, also allowing for broader historical transmission dynamics. The virus in Sri Lanka is **changing its genetic code faster than expected**, which likely means it's **spreading a lot and quickly evolving to better survive in people and mosquitoes**. These findings are notable as Sri Lanka is experiencing its first large chikungunya virus outbreak in a decade, which is part of a broader re-emergence of chikungunya virus activity in the Indian Ocean Region (i.e. Mauritus, Reunion, India, and Pakistan). While nearly 17,000 chikungunya cases have been reported to date, the historical lack of data in Sri Lanka and the high dengue burden likely contribute to misdiagnosis and under-reporting.

#### **Melioidosis - Philippines**

On 01-Jun-2025, the Department of Agriculture (DA), through its Bureau of Animal Industry (BAI), confirmed that the human cases initially reported as glanders disease in Siquijor, Central Visayas, have now been reclassified as melioidosis. This re-classification follows further investigation and laboratory confirmation by the Department of Health (DOH).

No animal cases have been confirmed to date. However, given the environmental nature of the bacterium, local transmission risks remain present. Enhanced biosecurity and sanitation measures are being encouraged among farmers and animal handlers to prevent further infections. The DA has also reiterated its ban on the slaughter and sale of sick animals, Source: da.gov.ph, NewsMedia

#### **Meningococcal Disease - Vietnam**

On 9-May-2025, the Ho Chi Minh City CDC issued an update citing data from the Pasteur Institute of Ho Chi Minh City, which indicated a **notable increase in meningococcal disease** cases in the Southern region of Vietnam during the first four months of 2025. From Jan to Apr-2025, 12 cases of meningococcal disease were reported across eight out of 20 provinces and cities in Southern Vietnam.

This represents a threefold increase compared to the three cases reported during the same period in 2024. Affected provinces include Ho Chi Minh City, Dong Nai, Ba Ria - Vung Tau, and Lam Dong.

Source: NewsMedia

#### Highly Pathogenic Avian Influenza A H5N1 - Cambodia

On 28-May-2025, the Cambodian Ministry of Health confirmed the country's **fourth human infection** of influenza A(H5N1) of the year, in the southwestern province of Kampong Speu, located roughly 60 km west of Cambodia's capital, Phnom Penh. Early investigations indicate that there were sick and dead chickens and ducks near the patient's house in the week prior to the onset of their illness. Testing of these birds has not been specified. Approximately 10 km away in the neighbouring district of Krong Chbar Mon a highly pathogenic avian influenza (HPAI) A(H5N1) outbreak was detected amongst **domestic poultry** on 17-May-2025. Cumulatively this year, the country has confirmed four infections, all of which have been fatal and generally located in provinces in the **south of the country**.

Source: <u>WHO</u>, <u>FAO</u>



## **Animal Infectious Disease Outbreaks 2025**

#### Influenza A viruses of high pathogenicity (Inf. with) (non-poultry including wild birds), H5N5

<u>CZE</u>: On May 9, 2025, a flock of domestic bird was tested positive by the National Reference Laboratory. The Case occurred at Ředice, Středočeský in a non-commercial hobby flock of hens, where products are used exclusively for own consumption in the same household.

(49.572934, 14.437653 (Approximate location))

#### High pathogenicity avian influenza viruses (poultry), H5N1/H7N9

<u>LVA</u>: On May 30, 2025, one domestic bird was tested positive by the Institute of Food Safety, Animal Health and Environment, BIOR. The Case occurred at Birzgales, Vidzemes in a backyard poultry farm with approx. 190 birds (laying hens).

(56.629872299163, 24.693017699948 (Approximate location))

**<u>BGR</u>**: On May 20, 2025, the National Reference Laboratory for avian influenza and Newcastle disease, BGR, confirmed H5N1 in a floc of suspected laying hens. Birds have been located in Aitos, Burgas.

(<u>42.6664</u>, <u>27.2482</u> (Approximate location))

<u>CZE</u>: On May 18, 2025, a flock of domestic bird was tested positive by the National Reference Laboratory. The Case occurred at Čejkovice, Jihomoravský in a poultry farm with commercial holding of pheasants, hens, ducks, geese, peacocks.

(<u>48.88303</u>, <u>16.28914</u> (*Approximate location*))

#### Newcastle disease virus

<u>MLT</u>: Eleven cases in domestic birds have been verified by the National Veterinary Laboratory, MLT, on 27 May 2025. The case occurred in Zebbug, Nofsinhar. Cases were found during surveillance within the restricted zone.

(35.866, 14.4353 and 35.8701, 14.4289 (Approximate locations)).

#### **Rabies virus**

<u>ARM</u>: Two cases of rabies in dogs have been verified by the Republican Veterinary-sanitary and Phytosanitary Center of Laboratory Services SNCO, on 22 and 31 May. Both cases occurred in Khanjyan, Armavir. Additionally one case of dog rabies was confirmed on May 20, 2025 in Pshatavan, Armavir.

(40.189, 43.973 and 40.0381, 44.0505 (Approximate locations)).

**<u>NOR</u>**: Two cases of rabies in arctic foxes have been verified by the Norwegian Veterinary Institute, on May 9 and 12, 2025. Both cases occurred in Svalbard.

(78.64602, 16.09102 (Approximate locations)).

#### African swine fever

**POL**: On May 30, 2025, one wild boar carcase was tested positive at the Official Veterinary Laboratory in Łódź, Local Branch in Piotrków Trybunalski. The cases occurred in Białaczów, Łódzkie. This is the first detection of the disease in wild boars in Łódzkie.

(<u>51.32992</u>, <u>20.38829</u> (Approximate location))

**ITA**: On May 16, 2025, one wild boar carcase was tested positive at the Experimental Zooprophylactic Institute (IZS), Perugia. The cases occurred in Africo, Reggio Di Calabria.

(38.08265, 15.93894 (Approximate location))

#### **Brucellosis**

<u>AUT</u>: Between March and May 2025 three brown hare were tested positive for Brucella suis by Austrian Agency for Health and Food Safety (AGES IVET), Mödling. Cases occurred in Deutschlandsberg, Sankt Stefan ob Stainz und Lannach.

(46.948581, 15.288917, 46.939737, 15.307449 and 46.93766, 15.2898 (Approximate location))

#### Sheep and goat pox

**BGR**: On May 21 and 26, 2025, in total 11 positive sheep sample were identified by the National Reference Laboratory for sheep and goat pox. The sheeps were located at Topolovgrad and Svilengrad, Haskovo. The May 21 outbreak of sheep and goat pox has been confirmed within an already restricted zone. The holding is located in the village of Kapitan Andreevo, very close to the border with Turkey. The May 26 outbreak has affected a backyard-type holding, with only one animal in the herd showing clinical signs of the disease. All necessary measures have been taken: the animals have been culled, the initial disinfection has been completed, and the final disinfection will begin soon.

(42.1161, 26.182 and 41.7171, 26.316 (Approximate location))

#### <u>Scrapie</u>

**<u>GBR</u>**: An isolated case of classical scrapie has been confirmed in a 2-year-old Welsh Mountain Badger Face female sheep in Borough of Swale, Kent on May 20, 2025.

(51.3, 0.75 (Approximate location))

#### Foot and mouth disease

<u>MLT</u>: 22 cases in domestic sheep, goats and cattle have been verified by FMD Institute, on May 12, 2025. The case occurred in Hacıbey-Başaklı village which is 1.8-2 km away from the Iraq border with the Hacıbey Stream between the village and Iraq. (37.1691, 44.4095 (Approximate locations)).