



Infectious disease surveillance and monitoring for animal and human health: summary of notable incidents of public health significance: February 2022

Contents

Coronavirus (COVID-19): Global summary.....	2
Lassa fever, England.....	3
Lassa fever, Nigeria.....	4
Wild polio and circulating vaccine derived polio virus, global update: 2021	5
Other incidents of interest.....	7
Anthrax, Uganda.....	7
Avian influenza A(H5N6), China.....	7
Chikungunya, Ethiopia.....	7
Crimean-Congo Haemorrhagic fever (CCHF), Mauritania	7
Cholera.....	7
Dengue, India.....	8
Hantavirus.....	8
Hepatitis E, South Sudan.....	8
Lassa fever.....	8
Novel influenza A(H1N2), United States of America (USA)	9
Measles.....	9
Monkeypox.....	9
Yellow fever.....	10

Incident assessment key

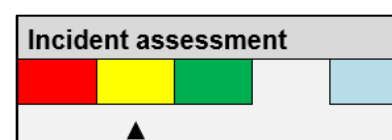
Deteriorating	No change	Improving	Undetermined
Incident is deteriorating with increased implications for public health	Update does not alter current assessment of public health implications	Incident is improving with decreasing implications for public health	Insufficient information available to determine potential public health implications

Notable incidents of public health significance

Coronavirus (COVID-19): global summary

Incident assessment

No change: Update does not alter current assessment of public health implication.



Event information

By the end of February 2022, the World Health Organization (WHO) had reported over [434 million coronavirus \(COVID-19\) cases](#) and nearly 6 million deaths globally. [A total of 10.4 billion vaccine doses](#) had been administered globally as of 22 February 2022. For further insight, please refer to the following reports:

- WHO's global [weekly epidemiological updates](#)
- ECDC's [weekly surveillance summary](#) for European countries
- UKHSA's [national COVID-19 surveillance reports](#)

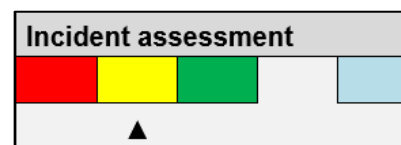
Updates to note

The Winter Olympic Games took place between 4 and 20 February in Beijing, China. As of 28 February 2022, 450 COVID-19 cases associated with this event were reported by the Beijing Organising Committee for the 2022 Olympic and Paralympic Winter Games.

Lassa fever, England

Incident assessment

No change: Update does not alter current assessment of public health implication.



Event information

In the [UK](#), between 9 and 18 February, 3 cases of Lassa fever were confirmed, including one death. One of the cases had travelled to Mali in late 2021, where Lassa fever is endemic. The other 2 cases were family members of the first case and had not travelled to Mali.

UK health authorities co-ordinated clinical and public health responses. All low and high-risk contacts of the cases were identified and followed-up for 21 days after their last exposure. This follow-up period has ended, and no new cases were identified. Contacts with extremely high-risk exposure were offered post-exposure prophylaxis. The [UKHSA](#) classified the risk to the general population as very low.

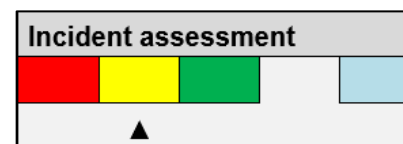
Prior to this incident, the last 2 reported cases of Lassa fever in the UK occurred during 2009. Sporadic cases of Lassa fever have been exported into Europe from endemic countries in West Africa in recent years, including Sierra Leone, Togo, Liberia and Nigeria.

Secondary transmission of Lassa fever has previously been reported in Europe in [Germany in 2016](#). The incident occurred following the evacuation of a health worker from Togo to Cologne, Germany, who later died. Lassa fever was confirmed post-mortem. A secondary case was confirmed in a funeral home employee who was exposed to the corpse of the first case.

Lassa fever, Nigeria

Incident assessment

No change: Update does not alter current assessment of public health implication.



Event information

Lassa fever cases continue to be reported in [Nigeria](#). During 2022, as of 27 February, there were 2,433 suspected and 540 confirmed cases reported. There were 98 deaths among the confirmed cases, resulting in a case fatality rate of 18.1%. Confirmed cases have been reported from 21 of Nigeria's 36 states. The states of Ondo, Edo and Bauchi collectively account for 73% of confirmed cases in 2022.

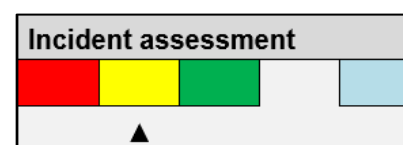
There has been an increase in the number of cases compared to the equivalent 2021 period, when 959 suspected and 136 confirmed cases (including 31 deaths, a case fatality rate of 22.8%) were reported across 8 of 36 states. In contrast to 2021, cases reported in 2022 have shown a wider geographical distribution.

Lassa fever is endemic in Nigeria and the annual peak of Lassa fever cases is typically observed during the dry season from December to April.

Wild polio and circulating vaccine derived polio virus, global update: 2022

Incident assessment

No change: Update does not alter current assessment of public health implication.



Event information

Wild polio virus

During February 2022, one new case of wild polio virus type 1 (WPV1) in was reported in Paktika, [Afghanistan](#). Overall, in [2021](#), 5 cases of WPV1 were identified globally: 4 cases in Afghanistan and one in Pakistan. Ongoing circulation of wild poliovirus in Afghanistan and Pakistan was declared as a [regional public health emergency](#) by the Eastern Mediterranean Regional Sub-committee in February 2022. The sub-committee committed to enhancing the level of support to political, community and civil society leaders, and sectors involved in the outbreak response. They also committed to support the co-ordination of activities across borders, including in Pakistan and Afghanistan, to ensure a synchronised approach to response activities.

The United Nations reported that 8 polio vaccination workers were attacked and killed in [Afghanistan](#) during February 2022. The national polio vaccination campaign, which resumed in November 2021, has been suspended in Kunduz city and Taloquan district as a result of the attacks. During the national polio vaccination campaign of 2021, 9 polio workers were killed.

[Malawi](#) reported a case of WPV1, on 17 February 2022, in a child who developed acute flaccid paralysis on 19 November 2021. Sequencing of the virus confirmed that the case was genetically linked to sequences detected in Pakistan in 2020. The last clinically confirmed case of WPV in Malawi was reported in 1992. The WHO has assessed the risk at national level as high, given low vaccination coverage in the country (less than 80%), a high population density and suboptimal case surveillance. Due to significant population movement between neighbouring countries, the risk at regional level was assessed as moderate. Response measures, including environmental surveillance, have been established in the region. [Vaccination campaigns](#) targeting 23 million children are planned for the coming months in Malawi, Mozambique, Tanzania, Zambia and Zimbabwe.

Circulating vaccine derived polio virus (cVDPV)

In February 2022, [Madagascar](#) reported a case of circulating vaccine-derived poliovirus type 1 (cVDPV1), which was the first case to be reported globally with symptom onset in 2022. An additional case with symptom onset during 2021 was also reported. In total, 15 cases of cVDPV1 have been reported globally with symptom onset in 2021, as of 22 February (15 cases from Madagascar and 3 cases from Yemen).

[Nigeria](#) reported a case of circulating vaccine-derived poliovirus type 2 (cVDPV2), which was the first case with symptom onset in 2022. In 2021, Nigeria reported more cases of cVDPV2 compared to any other country (415 cases out of 620 reported globally). Cases of cVDPV2 with symptom onset in 2022 were also reported from the [Democratic Republic of the Congo](#) (DRC) and [Somalia](#).

During February 2022, [Mozambique](#) reported 2 cases of cVDPV2 who had symptom onset during 2021. Prior to this, Mozambique had not reported any cases since 2018.

Other incidents of interest

Anthrax, Uganda

On 14 February 2022, the WHO was notified of a confirmed human case of anthrax in [Uganda](#). The case was a livestock worker who presented with skin lesions. Three cattle deaths had occurred in the same village a week previously, samples from which tested positive for anthrax by polymerase chain reaction (PCR).

Avian influenza A(H5N6), China

During February 2022, 6 new cases of avian influenza A(H5N6) were reported in mainland [China](#). The cases were living in Fujian (one case), Sichuan (one case), Jiangsu (2 cases) and Guangxi (2 cases). All cases had exposure to poultry. From 2014 to date, 71 human cases of avian influenza A(H5N6) have been reported in [China](#).

Chikungunya, Ethiopia

The chikungunya outbreak in Liben zone [Ethiopia](#), first reported in January 2022, continues. A total of 311 cases have been reported, as of 9 February. 3 cases have been confirmed by PCR and no deaths have been reported. The identification of the first ever confirmed case of a chikungunya infection in Ethiopia occurred in [June 2016](#) in the Dollo Ado district of the Somali region of Ethiopia, and may have been an extension of an outbreak occurring in Kenya to which the region borders.

Crimean-Congo Haemorrhagic fever (CCHF), Mauritania

An outbreak of CCHF has been reported in [Mauritania](#) following the confirmation of the first case on 4 February 2022. As of 19 February 2022, [5 confirmed cases](#) and 2 deaths from CCHF were reported. All the cases had exposure to livestock. The WHO reported that the cases came from 3 different regions and were not epidemiologically linked, indicating the potential widespread transmission of CCHF in an already endemic region.

Cholera

In [Nigeria](#), between 1 January and 27 February 2022, 701 suspected cases including 12 deaths (case fatality rate of 2.7%) were reported from 12 states. The largest number of cases have been reported from the states of Taraba (242 cases), Borno (111 cases) and Adamawa (91 cases). A multi-sectoral response to the outbreak is being coordinated by the Nigerian Centre for Disease Control.

From the beginning of 2022 to 13 February, the [DRC](#) has reported 3,234 suspected cases of cholera, including 44 deaths (case fatality rate of 1.4%), from 37 health zones in 9 provinces. The number of new cases reported nationally has been decreasing since December 2021,

although some areas, for example the Lomami Province, have reported that cases are increasing. In 13 health zones of South Kivu, Tanganyika and Haut-Lomami provinces, preparations for the second phase of an oral cholera vaccination campaign are in progress.

Dengue, India

During February 2022, dengue cases continued to be reported in Delhi, [India](#). Between 1 January and 26 February 2022, 39 cases of dengue were reported. In previous years, fewer cases were reported during the same time period (2 cases in 2021, 4 cases in 2020). Most dengue cases are usually reported between July and November. The rise in cases outside of the typical reporting season has been attributed to rain and high humidity levels. During 2021, a total of 9,613 dengue cases were reported in Delhi, which was the highest number of cases reported since 1996.

Hantavirus

During February 2022, media reported one case of hantavirus in La Paz, [Bolivia](#), and another case in Los Santos province of [Panama](#). Both cases were hospitalised. The type of hantavirus was not specified for either case.

Hepatitis E, South Sudan

There is an ongoing outbreak of hepatitis E in the Bentiu internally displaced persons (IDP) camp in [South Sudan](#). Between 1 January 2019 and 20 February 2022, 2,036 cases have been reported, of which 104 were confirmed. There has been a total of 15 deaths, equating to a case fatality rate of 0.7%. This represents an increase of 224 suspected cases reported since [23 January 2022](#).

Lassa fever

Between 1 January and 28 February 2022, [Liberia](#) reported 16 suspected and 17 confirmed cases of Lassa fever from 3 counties (Bong, Grand Bassa and Nimba). There have been 5 deaths amongst confirmed cases (case fatality rate of 15.2%). During [2021](#), 112 suspected and 24 cases (15 deaths) were reported between 1 January and 21 November.

In [Togo](#), a case of Lassa fever was confirmed on 26 February 2022 in Oti-South district. The case originally lived in the village of Djabata, Benin, and arrived in the town of Takpamba, Togo, on 4 February 2022. The case became symptomatic with fever, abdominal pains and cough on 11 February. The case died on 26 February, and a safe and dignified burial was performed. A total of 26 contacts were followed up with no further cases identified. The last Lassa fever outbreak in Togo was reported in 2019, when 2 cases were imported from Nigeria. The [WHO](#) have assessed the risk of transmission at national and regional level as low, due to Togo's management of past outbreaks.

Novel influenza A(H1N2), United States of America (USA)

A novel influenza A(H1N2) variant virus was detected in a person in California, [USA](#) during February 2022. The case, who had had direct contact with swine, recovered and did not require hospitalisation. No further transmission associated with this case was identified. Previously, the USA had reported 2 other human infections with novel influenza A virus during the 2021-2022 transmission season. One case of influenza A(H3N2) variant virus from Ohio and one case of influenza A(H1) variant virus in Oklahoma, of which the neuraminidase was not determined.

Measles

The [DRC](#) reported 13,189 suspected measles cases and 268 deaths (case fatality rate of 2.0%) between 1 January and 20 February 2022. Since the beginning of 2022, the outbreak has been confirmed in 20 out of 26 provinces. The most affected provinces are Haut-Katanga (2,421 cases) and Maniema (2,415 cases). Preparation for vaccination and other response measures are underway, according to the WHO.

In [South Sudan](#), a measles outbreak was declared on 23 February 2022. Between 1 January and 23 February 2022, 160 cases and 2 deaths have been reported, equating to a case fatality rate of 1.3%. Two counties are affected: Maban (112 cases) and Torit (33 cases).

Measles cases continue to be reported in [Togo](#). The outbreak was first reported in November 2021 in Zio district and, as of 27 February, [9 districts](#) are affected. In total, there have been 441 suspected cases and 24 confirmed cases. No deaths have been reported. The WHO have expressed concern about the speed at which the outbreak is spreading.

Monkeypox

[Cameroon](#) initially reported an outbreak of monkeypox in December 2021 and, as of 17 February 2022, 3 confirmed and 22 suspected cases have been reported. There have been 2 deaths. Cases have been reported from the Centre, North-West and South-West regions. Cases of monkeypox are sporadically reported in Cameroon, with more than half of regions reporting at least once case between 2020 and 2022.

In the [DRC](#), between 1 January and 13 February 2022, 542 suspected cases of monkeypox including 29 deaths (case fatality rate of 5.4%) were reported in 54 health zones in 14 provinces. The weekly number of cases decreased in the first 2 weeks of February after increasing from September 2021 to the end of January 2022. In the equivalent 2021 time period, there were 569 suspected cases and 17 deaths (case fatality rate 3.0%).

In [Nigeria](#), 9 suspected and 4 confirmed cases of monkeypox were reported between 1 January and 28 February 2022. A total of 34 cases were confirmed in 2021.

Yellow fever

In [Central African Republic \(CAR\)](#), between 3 August 2021 and 15 February 2022, a total of 17 probable cases (IgM positive) were reported of which 9 were confirmed at the regional reference laboratory. In 2020, the estimated yellow fever [vaccination coverage](#) in CAR was 41%, below the 80% target for herd immunity.

In [Chad](#), between 1 November 2021 and 15 February 2022, a total of 58 yellow fever IgM positive cases were reported from 7 provinces (Mandoul, Guéra, Mayo Kebbi Ouest, Moyen Chari, and le Lac). This outbreak represents the first time that yellow fever cases have been reported in the southern and western regions of [Chad](#).

In [Côte d'Ivoire](#), between 13 August 2021 and 15 February 2022, a total of 43 confirmed cases were reported. Since 9 January 2022, there has been an increase of 25 confirmed cases. The national yellow fever [vaccination coverage](#) estimated at 69% is less than the 80% WHO target required to confer herd immunity.

In [Ghana](#), 744 yellow fever cases including 158 probable (IgM positive) and 64 confirmed cases were reported between 15 October 2021 and 15 February 2022. [Media](#) have reported that the outbreak has spread to 13 of 16 regions in the country. The outbreak was initially reported among nomadic communities in the Savannah Region. Although nationally vaccination coverage is high ([88%](#)), pockets of the population, including unvaccinated nomadic people, remain at risk. A second phase vaccination campaign started at the end of February via the Ghana Health Service with support from UNICEF.

Publications of interest

COVID-19

A study in which COVID-19 data was collated for 177 countries and 181 subnational locations to [model](#) the variation in national rates of infection and fatality, concluded that pandemic preparedness and response plans may benefit from larger investment in risk communication and community engagement strategies to increase individuals confidence in public health guidance.

Human immunodeficiency virus (HIV)

A recently published [article](#) describes the identification of a highly virulent variant of subtype-B HIV-1 in the Netherlands. Enhanced virulence characteristics associated with this variant include an approximately 3.5 to 5.5-fold increase in viral load and the decline of CD4 cell at double the rate observed in individuals with other subtype-B strains.

Lassa fever

A publication by [Njuguna and others](#) reports on a hospital-associated outbreak of Lassa fever in a non-endemic area of Sierra Leone in 2019. The outbreak was first identified when a case was detected in a health worker who was medically evacuated to the Netherlands. A total of 3 confirmed cases (all health workers) and 2 probable cases (both patients) were reported. Two of the cases were transferred back to the Netherlands. Delayed detection of the outbreak was attributed to non-specific symptoms and signs of the index case.

Legionnaires' disease

A recently published [article](#) details a reported increase in cases of Legionnaires' disease in the USA since 2003. Prior to this, case numbers were reported as being relatively stable for around a decade and the reason for the increase is not clear. Between 1992 and 2002, the age-standardised average incidence was reported as being 0.48 cases per 100,000 population compared to 2.71 cases per 100,000 in 2018. Increasing racial disparities, seasonality and geographic focus were associated with rising incidence.

Leishmaniasis

Cases of visceral leishmaniasis have been reported from colder districts in [Nepal](#). Transmission of leishmaniasis occurs via bites from infected female Phlebotomine sandflies. Survival of these sandflies above an elevation of 650 metres was not previously possible, however, visceral leishmaniasis has been detected in areas such as Kalikot (elevation ranges from 738 metres to higher than 4,000 metres), indicative that the range of sandflies is moving to higher altitudes in the mountains due to changing climatic conditions.

Monkeypox

A recent [systematic review](#) evaluated the evolving epidemiology of monkeypox since the disease was first diagnosed in the DRC in 1970. Since the 1970s cases of monkeypox have been increasing, with outbreaks primarily reported from Central and West Africa. The most notable increases have been observed in the DRC. Since 2003, imported and travel-related exposures have been reported outside of Africa. In the 1970s, the median age at presentation was 4 years old. Between 2010 and 2019 this increased to 21 years. An overall case fatality rate of 8.7% was reported, with the Central African clade associated with a higher case fatality rate, compared to the West African clades (case fatality rate of 10.6% vs. 3.6%, respectively).

Orthohepevirus C

A [publication](#) from February 2022 described a case of acute hepatitis related to Orthohepevirus C (also known as rat Hepatitis E virus) infection in Spain. This is the first time the infection has been reported in Europe. Given that there is circulation of Orthohepevirus C in rodents worldwide, the risk of zoonotic transmission cannot be dismissed. The article describes 3 cases of Orthohepevirus C in patients with acute hepatitis.

Other publications of interest

A [publication](#) examining viral pathogens found in game animals in China between 2017 and 2021 identified 102 mammalian-infecting viruses, 65 of which had never previously been described. The authors assessed 21 of these viruses to be potentially high-risk to humans based on likely ability to infect humans and/or tendency to jump species barriers. Likely cross-species jumps were detected, as well as potential human-to-wildlife virus transmission events. Avian Influenza A(H9N2) was detected in civets and Asian badgers, of which the badgers displayed respiratory symptoms.

A [modelling study](#), examining the effect of the COVID-19 pandemic on dengue transmission in South East Asia and Latin America estimated that 720,000 fewer dengue deaths occurred in 2020, potentially due to COVID-19-related disruption. Closures of schools and reduced time spent in non-residential areas were associated with reduced dengue risk.

Novel agents, rare pathogens and disorders

In February 2022, [novel Hendra virus variant](#) was identified in a horse that died from an illness consistent with Hendra virus infection in Queensland, Australia in 2015. Routine diagnostic testing for Hendra virus had not detected the case because of genomic divergence. [Hendra virus](#) is a rare emerging zoonoses which can cause severe disease in horses and humans.

For more information or to sign up to the distribution list, please contact epiIntel@phe.gov.uk

© Crown copyright 2022

Published: April 2022

UKHSA publications gateway number: GOV-12062

You may re-use this information (excluding logos) free of charge in any format or medium, under the terms of the Open Government Licence v3.0. To view this licence, visit [OGL](#). Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.