**Force Health Protection** Branch **NATO MilMed COE** Munich



## Update 110 **FHP-Update** 06 April 2022



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GLOBAL 7 494 804 895 confirmed cases 465 200 000 recovered 6 163 501 deaths	<ul> <li>News:</li> <li>WHO: WHO's training for caregivers of children with autism goes online</li> <li>WHO: Today, WHO announced that Egypt's and Nigeria's medical products regulatory agencies had reached maturity level 3. This means that these national bodies have been found to function well and that they could be eligible for inclusion into the transitional WHO Listed Authorities, a list that will comprise the world's regulators of reference – that is, regulatory authorities that should be globally recognized as meeting WHO and other international standards.</li> <li>WHO: The World Health Organization (WHO) today launched its first ever global guidelines to</li> </ul>	<ul> <li>J 500.0</li> <li>J 500.0</li> <li>J 100.0 - 300.0</li> <li>J 00.0 - 100.0</li> <li>J</li></ul>	EUROPE 7 198 186 278 confirmed cases 185 400 000 recovered 1 879 032 deaths
USA (7-days incidence 55) لا 79 646 971 confirmed cases 78 209 435 recovered 977 911 death	<ul> <li>support women and newborns in the postnatal period – the first six weeks after birth. This is a critical time for ensuring newborn and maternal survival and for supporting healthy development of the baby as well as the mother's overall mental and physical recovery and wellbeing.</li> <li>WHO: WHO published <u>new guidelines for malaria</u></li> <li>WHO: Billion of people still breathe <u>unhealthy air</u></li> <li>ECDC: <u>Antibiotic resistance in Salmonella</u> and <u>Campylobacter bacteria</u> is still high, says a reporr released today by the European Centre for Disease Prevention and Control (ECDC) and the</li> </ul>	Guideling Marin       Guyane         Martinique       Mayone         Countries not visible       Mayone         In Hain       Lechtenstein	FRA (7-days incidence 1 478) 7 26 428 476 confirmed cases 24 286 072 recovered 143 832 deaths
<u>IND</u> (7-days incidence 0,6) بر <b>43 030 925</b> confirmed cases 42 483 889 recovered 521 487 deaths	<ul> <li>European Food Safety Authority (EFSA).</li> <li>OIE: The World Organisation for Animal Health (OIE) joins the <u>World Aquatic Animal Day</u> celebrations by raising awareness on the need to maintain sustainable aquatic ecosystems to ensure a better future for all.</li> <li>CDC: New CDC data illuminate <u>youth mental health threats</u> during the COVID-19 pandemic</li> <li>Topics:</li> <li>Global situation: War in Ukraine and Covid-19</li> </ul>		<u>GBR</u> (7-days incidence 638) الا 21 410 305 confirmed cases 20 121 427 recovered 166 148 deaths
BRA (7-days incidence 74) لا 30 042 272 confirmed cases 28 922 990 recovered 660 786 deaths	<ul> <li>Global Influenza Trends</li> <li>SARS-CoV-2 Variant of Concern</li> <li>Annual Epidemiological Report for 2020 (Chikungunya, Dengue)</li> <li>Other Infectious Disease Outbreaks</li> <li>Summary of information on the individual national Corona restrictions</li> <li>Travel Recommendations and other Useful Links</li> </ul>	2000 km       500 km         14-day       529         notification rate       500 km         12-209       600 km         14-day       529         120-239       480-959         No new cases    Disclaimerie This updated by the NATO Centre of Excellence (NATO MILMED COE) on its website is for general information purposes only and cannot be considered as official recommendation. All instinal and international laws, regulations, and guidelines as well as military orders supersede this information. All information is provided in good faith, however, the NATO MILMED COE makes no representation or warranty of any kind, express or implied, regarding the accuracy, adequacy, validity, reliability, availability or completeness of any information. The information by bished on this website is not intended to substitute professional medical advice, diagnosis or treatment. The NATO MILMED COE disclaim any liability in connection with the use of this information.	<u>DEU</u> (7-days incidence 1 322) الا 22 064 120 confirmed cases 17 680 000 recovered 130 720 deaths

## COVID-19 Situation by WHO Region, as of 03 April

#### Global epidemiological situation overview; WHO as of 03 April 2022

After the increase observed during the first half of March 2022, the number of new COVID-19 cases has decreased for a second consecutive week, with a 16% decline during the week of 28 March through 3 April 2022 as compared to the previous week (Figure 1). The number of new weekly deaths also decreased sharply (-43%) as compared to the previous week, when an artificial spike in deaths was observed (see WEU 85). Across the six WHO regions, over nine million new cases and over 26 000 new deaths were reported. All regions reported decreasing trends both in the number of new weekly cases and new weekly deaths (Table 1). As of 3 April 2022, just over 489 million cases and over 6 million deaths have been reported globally. These trends should be interpreted with caution as several countries are progressively changing their COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected. Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 3 April 2022\*\*

#### The highest numbers of new cases were reported from:

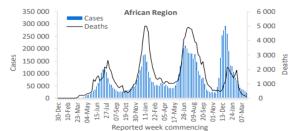
- Republic of Korea (2 058 375 new cases: -16%).
- Germany (1 371 270 new cases; -13%),
- France (959 084 new cases; +13%)
- Vietnam (796 725 new cases; -29%) and
- Italy (486 695 new cases: -3%)

Source: Weekly epidemiological update on COVID-19 - 5 April 2022 (who.int)

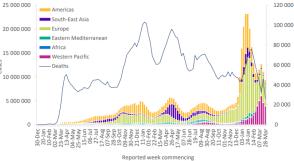
#### WHO regional overviews: Epidemiological week 28 March – 3 April 2022\*\* African Region

The African Region has continued to report a decreasing trend in weekly cases since January 2022, with just under 24 000 new weekly cases reported, representing a 19% decrease as compared to the previous week. However, nine (18%) countries in the Region reported an increase of over 20% in cases, with some of the greatest proportional increases observed in Mauritania (39 vs 4 new cases; +875%), Seychelles (442 vs 206 new cases; +115%) and Namibia (97 vs 63 new cases; +54%). The highest numbers of new cases were reported from South Africa (9802 new cases; 16.5 new cases per 100 000 population; +10%), Réunion (9756 new cases; 1089.7 new cases per 100 000: +15%), and Mauritius (794 new cases; 62.4 new cases per 100 000; -90%).

The number of new weekly deaths in the Region decreased by 21% as compared to the previous week, with over 100 new deaths reported. The highest numbers of new deaths were reported from South Africa (81 new deaths: <1 new death per 100 000 population: -6%). Ethiopia (12 new deaths: <1 new death per 100 000; +300%), and Zimbabwe (9 new deaths; <1 new death per 100 000; -18%).







#### **Region of the Americas**

The Region of the Americas has also been reporting a decreasing trend in weekly cases since mid-January 2022, with over 538 000 new weekly cases reported, corresponding to a 15% decrease as compared to the previous week. However, thirteen (23%) countries in the Region reported increases in new cases of 20% or greater, with the largest increases observed in Saba (55 vs 3 new cases; +1733), Aruba (123 vs 26 new cases; +373) and Saint Barthélemy (186 vs 78 new cases; +139%). The highest numbers of new cases were reported from the United States of America (205 433 new cases; 62.1 new cases per 100 000; +2%), Brazil (172 908 new cases; 81.3 new cases per 100 000; -25%) and Canada (48 853 new cases; 129.4 new cases per 100 000; +16%).

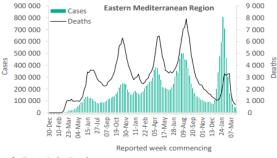
The number of new weekly deaths decreased by 61% as compared to the previous week, when an artificial spike was observed due to changes in the definition of COVID-19 deaths in Chile and in the United States of America. The highest numbers of new deaths were reported from the United States of America (4435 new deaths: 1.3 new deaths per 100 000; -10%). Brazil (1436 new deaths: <1 new death per 100 000; -19%), and Bolivia (Plurinational State of) that shows a sharp increase in deaths due to backlog reporting (408 new deaths; 3.5 new deaths per 100 000; +8060%).



#### **Eastern Mediterranean Region**

In the Eastern Mediterranean Region, new weekly cases have continued to decline after reaching a peak in early February 2022. Just over 45 000 new weekly cases were reported last week, a 9% decrease as compared to the previous week. However, two (9%) countries in the Region have reported increases in new cases of 20% or greater: Islamic Republic of Iran) (17 582 vs 9572 new cases; +84%) and Iraq (2379 vs 1956 new cases; +22%). The highest numbers of new cases were reported from the Islamic Republic of Iran (20.9 new cases per 100 000), Bahrain (5198 new cases; 305.5 new cases per 100 000; -20%) and Egypt (4375 new cases; 4.3 new cases per 100 000; -21%).

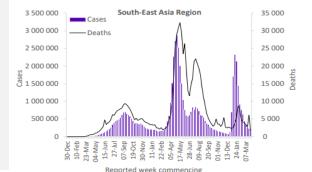
The number of new weekly deaths in the Region decreased by 16% when compared to the previous week, with just over 600 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (306 new deaths; <1 new death per 100 000; -27%), Tunisia (158 new deaths; 1.3 new deaths per 100 000; +58%), and Egypt (56 new deaths; <1 new death per 100 000; -33%).



#### South-East Asia Region

The South-East Asia Region reported over 221 000 new weekly cases, a 5% decline as compared to the previous week, continuing the decreasing trend observed since mid-January 2022. However, Bhutan reported an increase in new weekly cases of 107% (6357 vs 3076 new cases). The highest numbers of new cases were reported from Thailand (182 510 new cases; 261.5 new cases per 100 000; +4%), Indonesia (21 028 new cases; 7.7 new cases per 100 000; -42%), and India (8678 new cases; <1 new case per 100 000; -25%).

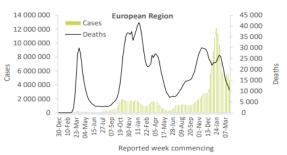
The Region reported just over 1600 new weekly deaths, representing a 73% decrease as compared to the previous week, when an artificial spike was observed due to retrospective adjustments reported from India. The highest numbers of new deaths were reported from Indonesia (618 new deaths; <1 new death per 100 000; -34%). Thailand (616 new deaths; <1 new death per 100 000; +11%), and India (341 new deaths; <1 new death per 100 000; -92%).



#### European Region

After the increase in cases observed in the European Region during the first half of March 2022, new weekly cases have decreased for the second consecutive week (-16% as compared to the previous week), with over 4.6 million new cases reported. Four (7%) countries in the Region reported increases in new cases of 20% or greater, with the largest observed in Malta (4243 vs 2434 new cases; +74%), Uzbekistan (212 vs 165 new cases; +28%) and Kyrgyzstan (89 vs 70 new cases; +27%). The highest numbers of new cases were reported from Germany (1 371 270 new cases; 1648.8 new cases per 100 000; -13%), France (959 084 new cases; 1474.6 new cases per 100 000; +13%) and Italy (486 695 new cases; 816.0 new cases per 100 000; -3%).

The number of new deaths has continued to decrease in the Region, with over 10 000 new deaths reported this week, a 15% decrease as compared to the previous week. The highest numbers of new deaths were reported from the Russian Federation (2357 new deaths; 1.6 new deaths per 100 000; -18%), Germany (1592 new deaths; 1.9 new deaths per 100 000; +5%), and Italy (966 new deaths; 1.6 new deaths per 100 000; -4%).



#### Western Pacific Region

After the increasing trend in new cases observed in the Western Pacific Region since the end of December 2021, new weekly cases declined for a second consecutive week (-16% as compared to the previous week), with over 3.8 million new cases reported. However, seven (23%) countries in the Region reported an increase of 20% or greater, with some of the largest increases observed in Mongolia (1628 vs 622 new cases reported; +162%) Solomon Islands (1044 vs 668 new cases; +56%) and Cook Islands (828 vs 554 new cases; +49%). The highest numbers of new cases were reported from the Republic of Korea (2 058 375 new cases; 4014.8 new cases per 100 000; 16%). Viet Nam (796 725 new cases; 818.5 new cases per 100 000; -29%), and Australia (399 479 new cases; 1566.6 new cases per 100 000; +9%).

The number of new weekly deaths shows a decrease of 16% as compared to the previous week, with just under 5600 new deaths reported. The highest numbers of new deaths were reported from the Republic of Korea (2336 new deaths; 4.6 new deaths per 100 000; -5%), China (960 new deaths; <1 new death per 100 000; -34%), and Japan (549 new deaths; <1 new death per 100 000; -16%).



# **Global Situation**

## War in Ukraine

## Covid-19

#### Update on the Situation in Ukraine

As of March 26, the number of civilian casualties recorded by OHCHR had reached 2,909, including 1,119 persons killed and 1,709 injured. The number of those killed includes at least 99 children. Hundreds of thousands more people remain trapped in areas which are heavily impacted by fighting and shelling.

The situation in both Mariupol and Chernihiv remains dire. Efforts are ongoing to establish humanitarian access, but these efforts have been unsuccessful to date. Some 90 per cent of Mariupol's residential buildings have been affected by active fighting, with some 40 per cent completely destroyed. Authorities in Mariupol estimate that 300 people were killed in the 16 March shelling of a theatre in the city.

Chernihiv remains under heavy bombardment and is effectively encircled, impeding the evacuation of civilians, including those with severe injuries, as well as the delivery of aid. An estimated 130,000 people remain trapped in the city without access to electricity, heating or water.

Avdiivka, Marinka, Mariupol, Lysychansk, Popasna, Rubizhne, Sievierodonetsk and Zolote remain among the areas most heavily impacted by shelling, including of civilian infrastructure, in eastern Ukraine. Despite this, some evacuations continue. More than 1,400 people were evacuated from Luhansk Oblast from 24-27 March. However, more than 100,000 families remain without electricity, with 40,000 families without a gas supply in the region. Indiscriminate airstrikes hitting civilians and civilian infrastructure continue. As of last week the World Health Organisation reported some 65 attacks on health care facilities resulting in injuries and fatalities. The Ukraine Ministry for Education and Science reported that some 550 education facilities had been damaged or destroyed. Source: Document - Ukraine situation: Flash Update #6 (unhcr.org)

#### Drugs for people living with HIV

Faced with alarming reports of disrupted HIV treatments threatening the lives of thousands of people, WHO, the United States President's Emergency Plan for AIDS Relief (PEPFAR), Ukrainian authorities and partners are ensuring the supply of antiretroviral drugs (ARVs), covering most of the needs of every single person known to be living with HIV in Ukraine for the next 12 months. WHO, together with PEPFAR; the Global Fund to Fight AIDS, Tuberculosis and Malaria; the Ukrainian Ministry of Health's Public Health Centre (UPHC), and the nongovernmental organizations Alliance for Public Health and 100% Life, ensured the procurement of 209 000 packs of the antiretroviral drug TLD (tenofovir, lamivudine and dolutegravir). This means that most of the needs of every single person known to be living with HIV in Ukraine will be met for the next 12 months. The first batch of the ARVs has crossed the Polish border into Ukraine and is about to be transported to HIV service facilities across the war-torn country.

#### The threat of disrupted treatments

An estimated 260 000 people are living with HIV in Ukraine. Prior to the war, over half, or nearly 150 000 people, were on life-saving antiretroviral treatment, including more than 2700 children. Without the access to the medicines they now have, these people would have been at grave risk. To keep opportunistic infections such as tuberculosis (TB) at bay, continuous access to ARVs is vital. This is in line with WHO's strategy of tackling what is sometimes referred to as a dual epidemic; with TB being one of the leading causes of death in people infected with HIV.

Source: WHO/Europe | Media centre - Ukraine: Crisis averted for now - WHO, PEPFAR and partners ensure supply of antiretroviral drugs for people living with HIV

#### **China Variants and Omicron XE Put Fresh Focus on Covid Mutations**

The disclosure of new Covid variants emerging in China and the rise of a potentially more transmissible strain in the U.K. has recast the spotlight on the ongoing risk of the virus, even as health experts say there's no reason to panic. The World Health Organization said a hybrid of two omicron strains -- BA.1 and BA.2 -- that was first detected in the U.K. and dubbed XE could be the most transmissible variant yet. It is estimated to spread 10% more easily than BA.2, which itself was more transmissible than the original omicron famous for its ease of penetration. Meanwhile in China, which is experiencing its <u>biggest outbreak</u> since Wuhan, authorities have disclosed two novel omicron subvariants that don't match any existing sequences. It's unclear if the infections were one-off events of little significance, or if they may be a sign of problems ahead. **Source: China Covid Variants and Omicron XE in U.K. Put Fresh Focus on Virus Mutations – Bloomberg** 

#### Suspension of supply of Covid-19 vaccine (Covaxin)

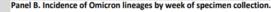
Today (02 April 2022), WHO confirmed the suspension of supply of Covaxin (Bharat Biotech) through UN procurement agencies, and recommended that countries using the vaccine take action as appropriate.

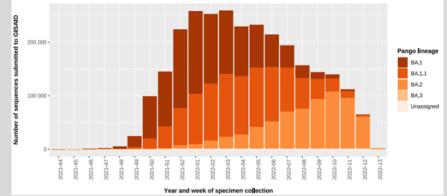
The suspension is in response to the outcome of a WHO inspection on 14 - 22 March 2022, and the need to conduct process and facility upgrade to address recently identified deficiencies in good manufacturing practices (GMP).

Bharat Biotech has committed to addressing the GMP deficiencies and is developing a corrective and preventive action plan for submission to the Drugs Controller General of India (DCGI) and WHO. In the interim and as a precautionary measure, the company has indicated that it will suspend production of Covaxin for export. As a consequence, supply will be interrupted for the foreseeable future.

The risk assessment to date does not indicate change in the risk-benefit ratio. The data, available to WHO, indicate the vaccine is effective and no safety concerns exist.

#### Source: Suspension of supply of COVID-19 vaccine (COVAXIN®) (who.int)





# 2021–2022 Global Influenza Trends & Future Outlook

## bluedot

Global influenza activity for the 2021–2022 influenza season remained lower than historical pre-pandemic levels. However, it increased this season compared to the prior season (2020–2021). This may be partly due to relaxation of COVID-19 protective measures, increasing international travel, and lower influenza vaccine coverage with a likely mismatch to a dominant circulating strain in some locations. Peak activity was observed in the last three weeks of 2021 followed by a subsequent gradual decline, coinciding with the emergence and rapid spread of the Omicron variant.

Currently, influenza A(H3N2) is the predominant type circulating globally with influenza(H3) making up most of the sequenced samples. The H3N2 strain is associated with a higher disease burden, typified by increased disease severity primarily affecting the elderly. Further, the H3N2 strain circulating in the northern hemisphere contained mutations that likely contributed to reduced influenza vaccine efficacy.

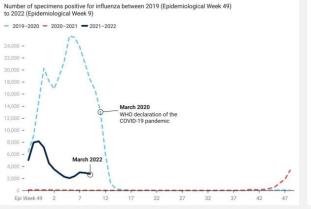
At a regional level, the tropical South America region (i.e., Central/South America) has increasing detection of influenza, with some locations nearing pre-pandemic levels (i.e., 2018–2019) of activity. Brazil, Peru, and Colombia account for the majority of influenza cases detected regionally, most which are influenza A(H3N2). Malaysia in the Southeast Asia region is reporting increased activity compared to prior years. Several countries in Europe are also observing increasing influenza activity.

Influenza activity in the prior seasons – Influenza B was the major subtype detected in the 2020–2021 season while influenza A (particularly, A(H3N2) and A(H1N1)pdm09) were the major subtypes in the 2019–2020 season. Both influenza A and B viruses circulate annually, with influenza B generally appearing more often at the end of the influenza season. The predominance of each strain also depends on the population immunity.

For the current influenza season, the Centers for Disease Control (CDC)'s network of influenza surveillance systems expanded with an additional component to track laboratory-confirmed influenza in long-term care facilities and a system to track influenza hospitalizations. Both cases and subsequent hospitalization rates peaked in the first weeks of January 2022, though hospitalization rates remain well below rates observed prepandemic (January 2020). The predominant subtype detected in the U.S. is influenza A(H3N2).

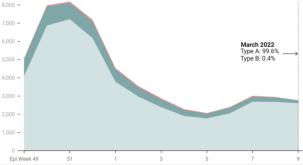
Compared to last year's season, there has been an increase in influenza activity.

#### Influenza Trends in the United States



#### Subtype Distribution of Current 2021–2022 Season Influenza Trends in the United States

Number of specimens positive for influenza in the currrent season, from 2021 (Epidemiologial Week 49) to 2022 (Epidemiological Week 9), by subtype Type A (H1N12009) Type 4 (H3) Type A (H3) Type B (Not subtyped) Type B (Not Subtyped)



#### Predominant Influenza Subtypes and Changes in Select Countries

For the current season (2021-2022), by predominant subtype, % specimens that were the predominant subtype at the start (Epidemiological Week 49, 2021) and end (Epidemiological Week 8, 2022) of the season, seasonal % change, and cases reported in prior seasons

Country	Predominant Subtype	% Predominant Subtype at start of season	% Predominant Subtype at end of season	, Seasonal % Change	All Flu Cases (2019 – 2022)
Brazil <sup>1</sup> <sup>2</sup>	A (H3)	65%	97%	31.8%	16 • - 6
Pakistan	A (H1N1pdm09)	0%	26%	25.6%	16 <b>16</b> 0
🐠 Kenya¹	A (H3)	45%	67%	21.2%	1
Argentina <sup>1</sup>	A (Not subtyped)	33%	51%	17.2%	17 • 4 287
🗲 Chile'	A (H3)	50%	63%	12.5%	10 14
🔹 Iran	A (H3)	63%	68%	4.9%	1,017
🔴 China	B (Victoria)	99%	99%	0.3%	2,715
H Peru <sup>1 2</sup>	A (H3)	100%	93%	-6.7%	1
兽 Malaysia'	A (H3)	91%	82%	-8.7%	30 🛝 🔥 0

Since the onset of COVID-19 pandemic, measures to combat COVID-19 disease transmission also have reduced influenza activity in the past three seasons (2019–2022). However, the relaxation of restrictions has led to an increase in COVID-19 transmission concurrently with increased influenza circulation compared to the 2020-2021 season. Although existing studies report low prevalence of coinfections thus far, an increase in co-infections of influenza and SARS-CoV-2 can be expected as the circulation of both viruses increase. Co-infections have shown to increase the risk of severe outcomes such as hospitalizations, the need for mechanical ventilation, and deaths. The potential burden on population health and healthcare systems must be accounted for in the near future. This consideration is particularly salient as both seasonal influenza and SARS-CoV-2 transmission is expected to continue alongside seasonal trends. From a public health perspective, countries are encouraged to enhance integrated surveillance to monitor transmission and severity of both influenza and SARS-CoV-2 viruses simultaneously and step up their influenza vaccination campaigns to prevent severe disease and hospitalizations associated with influenza. From a clinical perspective, clinicians should consider influenza as a differential diagnosis for COVID-19, particularly for highrisk groups. Notably, the maintenance of preventative measures over the past two years provides an increased susceptible population for influenza due to limited exposure via infections or immunization. This may lead to greater peak activity and potentially severe outcomes among vulnerable populations in the subsequent influenza seasons. Populations are encouraged to increase vaccination coverage to reduce the burden of influenza and mitigate healthcare system risk. Source: BlueDot FocusReport Global Flu Trends FINAL.pdf (mcusercontent.com)

## SARS-CoV-2 Variant of Concern

## **bluedot**

#### Omicron sublineage BA.2 effects in unvaccinated and previously uninfected hospitalized children in Hong Kong

Between December 31, 2021, and March 15, 2022, Hong Kong recorded more than 900,000 cases of COVID-19 mainly attributed to the Omicron BA.2 sublineage variant. This was an unprecedented increase when compared to the time period of early 2020 to late 2021 when just over 14,000 cases of COVID-19 had been reported. Between January 2020 and March 2022, school attendance for the population aged zero to 11 years old, was greatly reduced. On the days when children did attend school, they were restricted to attending only a half-day of in-person lessons. Additionally, COVID-19 vaccines were only approved for children aged five to 11 years old in mid-January 2022. As a result, many children in Hong Kong were both unvaccinated and had not previously been infected during the Omicron wave in the first three months of 2022.

A preprint research article, posted on Mar 21, 2022, **aimed to evaluate disease outcomes in children under the age of 11 years old in Hong Kong who were hospitalized due to COVID-19 between February 5, 2022, and February 28, 2022**. The population-based, case-control study used Electronic Medical Records and extracted hospitalization data from three distinct time periods: during the Omicron wave from February 5 to February 28, 2022 (n=1,147), the pre-Omicron period from January 1, 2021, to November 1, 2021 (n=737), and the pre-COVID-19 period from 2015 to 2019 for children hospitalized due to influenza (n=32,212) and parainfluenza (n=16,423). The extracted data was categorized into three broad categories: fatality and severity of disease, neurological illness, and respiratory complications. These categorizations were further broken down into more specific outcomes and an odds ratio was calculated for the outcomes.

#### The key findings from this paper were:

- Fatality of disease: A total of four deaths due to COVID-19 were reported among children. This resulted in a higher in-hospital case fatality rate (CFR; 0.35%) when compared to before November 1, 2021, when no child deaths were reported (CFR=0%), as well as the time ranges reviewed for influenza (CFR=0.05%), and parainfluenza (CFR=0.04%).
- Severity of disease (hospitalizations): Approximately 80% of hospitalized children during the study were under the age of five. Children hospitalized for Omicron infections were more likely to be admitted to a Pediatric Intensive Care Unit, when compared to previous SARS-CoV-2 waves and influenza but had similar odds as parainfluenza cases. Children hospitalized for COVID-19 were found to have significantly higher odds of requiring mechanical ventilation when compared to those hospitalized for influenza.
- Neurological illness: Children with Omicron infections had higher odds of experiencing seizures than those with influenza and parainfluenza.
- **Respiratory complications:** Although there was a similar incidence of pneumonia for children with Omicron infections and other SARS-CoV-2 infections, this incidence was still higher than that of children infected with influenza and parainfluenza.

Overall, these findings show that the **Omicron BA.2 sublineage may cause more severe disease in unvaccinated and previously uninfected children than previous SARS-CoV-2 variants and influenza virus.** For this reason, the authors of the study highly recommend increased vaccination and approval of vaccines for use in children. Limitations to this study include the lack of availability of genomic sequencing for the cases included in the study. Therefore, it is not confirmed that all children hospitalized during the Omicron wave were infected with the Omicron variant or BA.2 sublineage, and it is unclear which SARS-CoV-2 variant children were infected with before the Omicron wave. Additionally, as this study focused on medical records at hospitals, it may not be fully representative or inclusive of children who were treated at home or did not seek medical attention, and the in-hospital CFR may not be representative of overall CFRs among children (<u>1</u>).

More studies are needed to confirm these findings as this study only provides a glimpse into the severity of disease in infected children in Hong Kong. Therefore, caution is advised when comparing to other countries. Children in Hong Kong were sheltered from SARS-CoV-2, and as a result, may have a lack of baseline immunity seen within other populations. For example, in the United Kingdom (UK), before the COVID-19 vaccination campaign began, over 450,000 children under the age of 18 had already been diagnosed with COVID-19. According to the latest UK COVID-19 School Infection Survey, 62.4% of primary school students (54.9% of those aged 4 to 7 years old, and 74% of those aged 8 to 11 years old) had antibodies against COVID-19 from January to February 2022. A full course of vaccination provides the best defence against severe COVID-19 disease and death; however, children present a complex situation given their low vaccination rate due to lack of approved vaccines for their age range, reduced masking guidelines, and resulting in increased exposure to infected individuals in educational institutions (2).

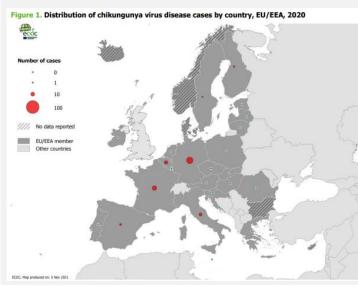
## **Annual Epidemiological Report for 2020**

#### **Chikungunya Virus Disease**

For 2020, 24 countries reported 59 cases of chikungunya virus disease, of which 52 (88%) were confirmed. This was the lowest number of cases reported at the EU/EEA level since 2016. However, the UK, which was among the top three countries with the highest number of cases reported from 2016 to 2019, was not included in the data collection in 2020 due to no longer being an EU Member State. From 2016 to 2020, the number of reported cases (excluding those from the UK) ranged from 111 in 2018 to 442 in 2017, with no discernible trend. An 86% decrease in number of cases was observed in 2020 compared with 2019 (excluding UK data). In 2020, Germany reported the highest proportion of cases (44%), followed by France (22%) (Figure 1). The EU/EEA notification rate in 2020 was <0,1 cases per 100 000 population.

The decrease in the number of travel-related cases of chikungunya virus disease in the EU/EEA in 2020 can largely be explained by the decrease in travel that occurred due to the restrictions implemented during the COVID-19 pandemic. This may be supported by the fact that, in 2020, the number of chikungunya virus disease cases reported globally generally decreased compared to previous years. Overall, 2020 data should be interpreted with caution, as it is unclear how the COVID-19 pandemic influenced diagnostic capacity and surveillance in EU/EEA countries and globally.

As the UK left the EU on 31 January 2020, the country did not report any 2020 data through TESSy. Considering that the UK was among the countries reporting the highest numbers of cases in previous years, the total number of cases reported in the EU/EEA compared with related rates of infection should be interpreted with caution. **Source:** Chikungunya virus disease - Annual Epidemiological Report for 2020 (europa.eu)



#### Public health implications

Vigilance regarding travel-related cases of chikungunya and other Aedes-borne infections remains essential. Public health authorities in the EU/EEA should consider raising awareness among clinicians and travel clinic specialists about the risk related to such diseases, especially when and where vector-borne secondary transmission may take place. The detection of an autochthonous case in the EU/EEA should trigger epidemiological and entomological investigations to assess the size of the transmission area and the potential for onward transmission, as well as to guide vector control measures.

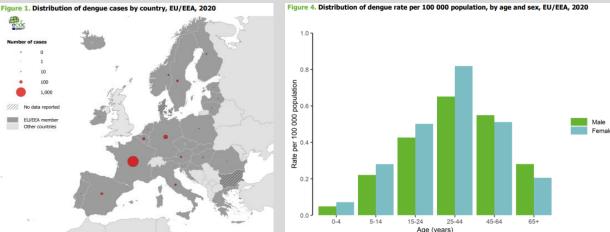
Source: <u>Chikungunya virus disease - Annual</u> Epidemiological Report for 2020 (europa.eu)

#### **Dengue**

For 2020, 26 countries reported 1 957 cases of dengue, of which 1 820 (93%) were confirmed. This was the lowest number of cases reported at the EU/EEA level since 2016. However, the UK, which was among the three countries with the highest number of cases reported from 2016 to 2019, did not provide data in 2020 due to no longer being an EU Member State. From 2016 to 2020, the number of reported cases (excluding those from the UK) ranged from 1 563 in 2017 to 3 540 in 2019, with no discernible trend. A 45% decrease in number of cases was observed in 2020 compared with 2019 (excluding UK data). This decrease was particularly pronounced in Austria, Germany, Italy, Spain and Sweden. In contrast, France observed a large increase in number of cases compared to previous years. In 2020, France reported the highest proportion of cases (70%), followed by Germany (10%) (Table 1, Figure 1). The EU/EEA notification rate in 2020 was 0.5 cases per 100 000 population; the country-specific rate was highest in France (2.0 cases per 100 000 population).

The decrease in the number of travel-related cases of dengue in the EU/EEA in 2020 can largely be explained by the decrease in travel that occurred due to the restrictions implemented during the COVID-19 pandemic. Similarly, compared to previous years, the number of dengue cases reported in dengue-endemic countries was generally very low [4]. While it could be hypothesised that the level of virus circulation worldwide was low, it is likely that the COVID-19 pandemic limited diagnostic and surveillance capacities in EU/EEA countries and globally, thereby limiting the number of cases diagnosed and reported. Overall, 2020 data should be interpreted with caution, as it is unclear how the pandemic influenced diagnostic capacity and surveillance in EU/EEA countries or globally. The vast majority of countries observed a decrease in the number of travel-related cases; however, France observed a major increase driven by epidemics in the French overseas departments of Martinique and Guadeloupe, as travel between the departments and mainland France remained possible during most of 2020.

Source: Dengue - Annual Epidemiological Report for 2020 (europa.eu)



# Other Infectious Disease Outbreaks/ conflicts

## **b**luedot

#### <u>Anthrax</u>

(i)

**Russia** - A case of anthrax has been reported in the village of Kakashur in Dagestan, Russia. According to media sources, the individual was hospitalized on March 30, but he is experiencing mild disease. It is believed that the source of infection occurred while slaughtering and butchering cattle. While there is limited information on the type of anthrax that the individual is experiencing (cutaneous, gastrointestinal or inhalational), health officials have implemented quarantine measures in the village of Kakashura until further notice. Local health authorities began investigations to identify infection sources in an effort to limit disease spread and have highlighted that selling meat products in undesignated areas is prohibited. This is the first case of anthrax reported from Dagestan since October 2021, when health officials reported a cluster of cutaneous anthrax cases in the Kakamakhi village in Dagestan.

#### Source: Insights by BlueDot

#### **Q** Fever

**Spain** - Several cases of Q fever have been reported during the last week of March in the province of Asturias in Spain. According to public health officials, while the region is not unfamiliar with Q fever cases due to its close relationship with cattle, it is alarming that the cases have surfaced in different regions of the province in just a few days. More importantly, although it is likely that there is only one source of infection, only two of the infected individuals are related. Public health has raised its concern about the matter and is now conducting an investigation to identify the source of the outbreak, asking healthcare providers to include Q fever among the differential diagnosis when evaluating a person who has respiratory symptoms.

#### **Measles**

**Niger** - Cases of measles have been reported in Birnin Konni, the Tahoua Region of Niger, for 2022. According to the Konni Health District, 721 cases of measles and one fatal case have been reported between January 1 and March 27, 2022. Compared to the same period last year, this is a 77% decrease in cases. According to the WHO, 95% vaccination coverage for two doses is needed to prevent measles. As of 2019, the measles vaccination coverage in Niger was about 79% for the first dose and 58% for the second dose. This is noteworthy as officials have stated that the inoculation coverage for vaccine-preventable diseases is low, and routine immunization rates dropped during the pandemic.

#### Source: Insights by BlueDot

### **Typhoid**

**China** - A recent drug-resistant typhoid outbreak in China is likely linked to strains from Pakistan. With precautionary public health measures in place, and most cases resolved, the risk of further transmission among the general public is expected to be low. Despite the low local risk, this event highlights the relative mobility and global threat posed by antibiotic-resistant bacteria. **Source: Insights by BlueDot** 

#### **Leishmaniasis**

**Syria** - According to the Syrian Arab Republic's Early Warning Alert and Response System (EWARS) Weekly Epidemiological Bulletin for 2022 Week 11, as of March 19, 2022, there have been 22,826 suspected cases of leishmaniasis in Syria since the start of 2022. During the week of March 13 to Mar 19, 2022, the cities of Aleppo (1,041), Al-Hasakeh (330), and Hama (161) reported the highest number of suspected cases. The bulletin shows that for the three weeks before March 13, 2022, there has been a decreasing trend in reported suspected cases. News media, however, has reported a large increase in suspected cases in the town of Tall Tamr located in the northeastern governorate of Al-Hasakeh. An estimated 13,000 suspected cases have been reported to date, which is approximately 25% of the town's population. The Nahr al Khabur River which runs through Tall Tamr, is reported to be drying out due to drought conditions affecting the area. As a result, the polluted river has become an ideal breeding ground for the sandflies, the vector of leishmaniasis. Due to the ongoing conflict in Syria, the country lacks adequate medical resources and has called on international health organizations to assist with controlling casa.

Source - Insights by BlueDot

### **Cholera**

**Bangladesh** - Media reports are raising concerns over a cholera outbreak across the districts of Dakshinkhan, Jatrabari, Mohammadpur, Sabujbagh and Mirpur, Bangladesh. In addition, according to officially available information, local hospitals from the affected areas have reported that daily, there have been three times more inpatients coming in with diarrhea since March 9, 2022, when compared to rates observed in 2021. In Bangladesh, cholera remains a significant public health problem. Populations that live in high-risk, densely populated environments with poor access to safe water and sanitation, have the highest risk of cholera outbreaks. It is suggested that 66 million people are at risk of cholera in Bangladesh, with an incidence rate of 1.64/1,000 population, 100, 000 cases, and 4,500 deaths annually. **Source: Insights by BlueDot** 

#### MERS

**Qatar** - The Qatar Ministry of Public Health (MOPH) has confirmed a second case of Middle East Respiratory Syndrome Coronavirus (MERS-CoV) in the country for 2022. The patient is an 85-year-old resident with multiple chronic diseases. The patient had a history of recent travel outside of the country, during which they had direct contact with camels. It was not specified which country the individual travelled from, their mode of travel, whether there may be a risk of exposure to others, or where in Qatar the patient is located. However, the MOPH reports that the patient developed symptoms before arrival in Qatar, and following arrival was promptly admitted to hospital. The MOPH continues to advise residents, especially those with immunodeficiencies, to adhere to proper hygiene measures and seek medical attention if symptoms such as fever and shortness of breath are experienced.

#### Source: Insights by BlueDot

Source: <a href="https://covid19.trackvaccines.org/">https://covid19.trackvaccines.org/</a> as of 20.01.2022

# Summary of information on the individual national Corona restrictions

					-								i
NATO Member State (click on country for official COVID-19 information)		Approved vaccines											
		Comirnaty	Spikevax	Janssen	Vaxzevria	Nuvaxovid	Sputnik V	CoronaVac	Covishield	Convidecia	Covilo	Turkovac	
	<u>Albania</u>	х			x		х	x					
	Belgium	x	x	x	х	x							
	Bulgaria	x	x	x	x	х							
*	<u>Canada</u>	х	x	x	х				x				
**************************************	<u>Croatia</u>	x	x	x	х	x							
	Czech Republic	х	x	x	х	x							
	<u>Denmark</u>	x	x	x		x							
	<u>Estonia</u>	x	x	x	х	x							
	France	x	x	x	x	х							
	Germany	x	x	x	х	x							
	<u>Great Britain</u>	x	x	x	x								
	Greece	x	x	x	х	х							
	Hungary	х	x	X	x	х	x		X	х	X		
	<u>Italy</u>	х	х	х	x	x							
	<u>lceland</u>	x	x	x	x	x							

The icons are linked to the respective information. Please click on the icons for information.

Source: <a href="https://covid19.trackvaccines.org/">https://covid19.trackvaccines.org/</a> as of 20.01.2022

# Summary of information on the individual national Corona restrictions

NATO Member State (click on country for official COVID-19 information)		Approved vaccines											
		Comirnaty	Spikevax	Janssen	Vaxzevria	Nuvaxovid	Sputnik V	CoronaVac	Covishield	Convidecia	Covilo	Turkovac	
	<u>Latvia</u>	x	x	x	x	x							
	<u>Lithuania</u>	x	x	x	х	x							
	Luxembourg	x	x	x	х	x							
<b>\</b>	<u>Montenegro</u>				х		х				x		
	<u>Netherland</u>	x	x	x	x	x							
	North Macedonia	x			х		х				x		
	<u>Norway</u>	x	x	x		x							
	<u>Poland</u>	x	x	x	х	x							
۲	<u>Portugal</u>	x	x	x	х	x							
	<u>Romania</u>	x	x	x	х	x							
ŧ	<u>Slovakia</u>	x	x	x	х	х							
\$	<u>Slovenia</u>	x	x	x	х	x							
iiii	<u>Spain</u>	x	x	x	x	x							
C*	<u>Turkey</u>	х					х	x				x	
	<u>USA</u>	x	х	x									

The icons are linked to the respective information. Please click on the icons for information.

# **Travel Recommendations and other Useful Links**

## **Travel Recommendations**

Many countries have halted some or all international travel since the onset of the COVID-19 pandemic but now have re-open travel some already closed public-travel again. This document outlines key considerations for national health authorities when considering or implementing the gradual return to international travel operations.

The decision-making process should be multisectoral and ensure coordination of the measures implemented by national and international transport authorities and other relevant sectors and be aligned with the overall national strategies for adjusting public health and social measures.

Travel has been shown to facilitate the spread of COVID-19 from affected to unaffected areas. Travel and trade restrictions during a public health event of international concern (PHEIC) are regulated under the International Health Regulations (IHR), part III.

The majority of measures taken by WHO Member States relate to the denial of entry of passengers from countries experiencing outbreaks, followed by flight suspensions, visa restrictions, border closures, and quarantine measures. Currently there are exceptions foreseen for travellers with an essential function or need.

Information on COVID-19 testing and quarantine of air travellers in the EU and the US you can find following the link:

- https://www.ecdc.europa.eu/en/publications-data/guidelines-covid-19-testing-and-quarantine-airtravellers
- https://www.cdc.gov/coronavirus/2019-ncov/travelers/how-level-is-determined.html

#### More information about traveling worldwide:

- National regulation regarding travel restrictions, flight operation and screening for single countries you will find <u>here</u> (US) and <u>here</u> (EU).
- Official IATA travel restrictions. You will find <u>here</u>.

#### More information about traveling in the EU

- by the European Commission you will find here:

https://www.consilium.europa.eu/en/policies/coronavirus/covid-19-travel-and-transport/

- The *ECDC* publishes a map of EU Member States, broken down by regions, which show the risk levels across the regions in Europe using a traffic light system. Find it <u>here</u>.

As a general rule, information on new measures will be published 24 hours before they come into effect.

All information should also be made available on <u>Re-open EU</u>, which should contain a cross-reference to the map published regularly by the European Centre for Disease Prevention and Control.

## **Useful links**

### ECDC:

- All info about the COVID-19 pandemic; (situation updates, latest news and reports, risk assessments etc.)
- <u>COVID-19 Vaccine tracker</u>
- SARS-CoV-2 variants dashboard for EU
- Latest Risk assessment on COVID-19, 15 Feb 2021
- All "guidance's and technical reports" can be found under "All COVID-19 outputs" on this page here

### WHO:

- Epi-WIN <u>webinars and updates</u>
- All information about the COVID-19 pandemic: <u>https://www.who.int/emergencies/diseases/novel-coronavirus-2019</u>

### CDC:

- COVID Data Tracker and weekly review
- What's new and Updated
- Guidance for COVID-19

### **References:**

- European Centre for Disease Prevention and Control <a href="https://www.ecdc.europa.eu/en">https://www.ecdc.europa.eu/en</a>
- World Health Organization WHO; <u>www.who.int</u>
- Centres for Disease Control and Prevention CDC; <u>www.cdc.gov</u>
- European Commission; <a href="https://ec.europa.eu/info/live-work-travel-eu/health/coronavirus-response/travel-and-transportation-during-coronavirus-pandemic\_en">https://ec.europa.eu/info/live-work-travel-eu/health/coronavirus-response/travel-and-transportation-during-coronavirus-pandemic\_en</a>
- Our World in Data; <u>https://ourworldindata.org/coronavirus</u>
- Morgenpost; <a href="https://interaktiv.morgenpost.de/corona-virus-karte-infektionen-deutschland-weltweit/">https://interaktiv.morgenpost.de/corona-virus-karte-infektionen-deutschland-weltweit/</a>
- BlueDot; <u>https://bluedot.global/</u>