SARS-CoV-2 laboratory surveillance in the Western Pacific Region

As of week 28, 2024 (the week ending on 14 July 2024), a total of 12,601 specimens tested for SARS-CoV-2 were submitted to FluNet from 10 countries and areas in the Western Pacific Region. The positivity rate was 6.7% (Figure 1). The country-specific number of testing and calculated positivity rate in week 26 of 2024 are presented in Table 1 below. China and Republic of Korea reported an increase in their SARS-CoV-2 positivity rate. Percent positivity is calculated using the numbers of samples positive and processed for SARS-CoV-2. The data are provided to FluNet by National influenza Centres (NICs) of the Global Influenza Surveillance and Response System (GISRS) and other national influenza reference laboratories collaborating actively with GISRS. More information on FluNet and its data sharing mechanism are available here.

Figure 1: SARS-CoV-2 tested specimens reported to FluNet from countries, areas and territories, Western Pacific Region, 2020-2024
(Source: GISRS surveillance data reported to FluNet)

Table 1: Weekly number of testing and positive rate reported to FluNet, week 28
(Source: Integrated influenza and other respiratory viruses surveillance dashboard)

<table>
<thead>
<tr>
<th>Countries and areas (most recent week of data)</th>
<th>Number of testing for SARS-CoV-2</th>
<th>SARS-CoV-2 positivity rate (%)</th>
<th>Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia (28 of 2024)</td>
<td>3,880</td>
<td>5.62</td>
<td>↓</td>
</tr>
<tr>
<td>China (28 of 2024)</td>
<td>7,930</td>
<td>7.02</td>
<td>↑</td>
</tr>
<tr>
<td>Republic of Korea (28 of 2024)</td>
<td>272</td>
<td>13.60</td>
<td>↑</td>
</tr>
<tr>
<td>Lao People’s Democratic Republic (28 of 2024)</td>
<td>62</td>
<td>14.52</td>
<td>↓</td>
</tr>
<tr>
<td>New Zealand (28 of 2024)</td>
<td>99</td>
<td>2.02</td>
<td>↓</td>
</tr>
<tr>
<td>New Caledonia (28 of 2024)</td>
<td>40</td>
<td>2.50</td>
<td>↓</td>
</tr>
<tr>
<td>Papua New Guinea (28 Of 2024)</td>
<td>1</td>
<td>100</td>
<td>-</td>
</tr>
<tr>
<td>Philippines (28 of 2024)</td>
<td>66</td>
<td>7.58</td>
<td>↓</td>
</tr>
<tr>
<td>Singapore (28 of 2024)</td>
<td>255</td>
<td>8.63</td>
<td>↓</td>
</tr>
<tr>
<td>Viet Nam (28 of 2024)</td>
<td>1</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes: The quality and consistency of this surveillance data are influenced by changes in health seeking behaviours, routine in sentinel sites, national testing priorities and capacities, and public health and social measures implementation. In addition, test percent positivity from sentinel surveillance can be very different than that of universal surveillance due to varying objectives, case definitions and coverage. Therefore, the data presented here should be interpreted carefully. The data is also subject to change over time, and there can be difference from national public health authorities and other sources.
Tracking SARS-CoV-2 variants in the Western Pacific Region

As of 2 August 2024, relative frequency of circulating variants in the Western Pacific Region is as follows: JN.1 at 91% and B.1.1.529 at 9% (**Figure 2**). JN.1 has become a dominant variant in the Region since January 2024. The country-specific data is available below for certain countries where the information is routinely updated.

![Figure 2: Relative frequency (%) of circulating variants in the Western Pacific Region, 2023-2024](Source: GISAID hCoV-19 Variants Dashboard)

COVID-19 surveillance summary

COVID-19 surveillance in the WHO Western Pacific Region reflects the ongoing transition of Member States from the pandemic emergency response to sustainable, integrated, and longer-term COVID-19 disease management. In the current transitional phase, some countries have already integrated their COVID-19 surveillance into existing systems while other countries maintain COVID-19 surveillance from the emergency phase of the pandemic. Due to these various approaches, population groups, data formats, and reporting mechanisms of COVID-19 surveillance are different across countries.

In the interim, guided by standing recommendations, WHO continues to support Member States in monitoring, assessing and responding to the risks posed by COVID-19. This COVID-19 surveillance summary, therefore, covers countries and areas where routine surveillance is conducted, and the surveillance data is publicly available. A detailed description of COVID-19 surveillance in each country included in the report is available in Annex 1. The surveillance data should be interpreted with caution, taking into account various surveillance methodologies and reporting systems described in Annex 1.

Countries in the temperate zone of the Northern Hemisphere

**China – severe cases and deaths (monthly update)**

There are no updates available for the month of July.

From 1 to 30 June 2024, 112 new severe COVID-19 cases and five deaths were reported from 31 provinces, autonomous regions and municipalities, and Xinjiang Production and Construction Corps in China (**Figure 3**), which is a decrease compared to 157 severe cases and eight deaths in May 2024. From 1 to 30 June 2024, JN.1 was the most prevalent variant in China.
Japan – COVID-19 cases (sentinel surveillance)

There are no updates available for the month of July.

In June 2024, an increasing trend in the number of cases per sentinel sites have been reported with 3.99 (19 719 cases) in week 23 (3-9 June), 4.16 (20 561 cases) in week 24 (10-16 June), 4.61 (22 754 cases) in week 25 (17-23 June), and 5.79 (28 614 cases) in week 26 (24-30 June) (Figure 4). The number of new hospitalisations reported from key sentinel sites nationwide was as follows: in week 23, a total of 1 400 hospitalizations, 1 372 in week 24, 1 493 in week 25, and 1 691 in week 26. (Figure 5).
**Republic of Korea – COVID-19 cases (sentinel surveillance)**

In week 30 (the week ending on 27 July 2024), the detection rate of SARS-CoV-2 reported from virological sentinel sites was 29.2%, an increase from the previous week 29 (24.6%) . Overall, the detection rate has been increasing for more than a month (Table 2). The hospital admissions increased in week 30 with 465 hospital admissions as compared to 226 hospitalizations in week 29 (Figure 6).

Table 2: Laboratory-based pathogen surveillance in Republic of Korea: respiratory viruses, week 27-30 of 2024  
(Source: Public Health Weekly Report, Korea Diasease Control and Prevention Agency)
Countries/areas in the tropical zone

Hong Kong SAR, China – laboratory-confirmed COVID-19 cases, severe cases, and deaths

In week 29 of 2024 (14 July - 20 July 2024), the weekly number of newly recorded positive nucleic acid test laboratory detections for SARS-CoV-2 virus was 616 as compared to 611 in the preceding week (Figure 7). The weekly number of severe COVID-19 cases including deaths with cause of death preliminarily assessed to be related to COVID-19 was 15 compared to nine in the preceding week (Figure 8). Based on the sewage samples collected for surveillance of SARS-CoV-2 variants, as of 24 July 2024, JN.1 and its descendant lineages remained the most prevalent variant in Hong Kong SAR, China, comprising 100% of all characterized specimens, and about 59% of all belongs to the newer descendant strain KP.2, one of the descendant lineage of JN.1.
Malaysia – COVID-19 confirmed cases and hospital admissions (sentinel surveillance)

The 7-day daily average of COVID-19 confirmed cases was 274 on 21 July 2024, compared to 376 on 14 July 2024 (Figure 9). COVID-19 related hospital admissions have shown a slight decrease with 7-day average of admissions recorded at 80 on 21 July 2024, compared to 87 on 14 July 2024 (Figure 10).

Viet Nam: COVID-19 cases

As of the week 30, 2024 (week ending on 28 July), Viet Nam has reported a total of 5 561 confirmed and suspected COVID-19 cases, including one death. The majority of cases were reported from the Northern region (4 688 cases), accounting for 84.3 % of the total cases, followed by the Southern region (650 cases) with 11.7%.

Over the past six consecutive weeks (from the week 25 to the week 30 of 2024), a significant increase has been observed in the country. During the week 30 (from 22 July 2024 to 28 July 2024), a total of 463 cases with no deaths have been reported across 31 out of 63 cities/provinces. This marks a 1.6 times increase compared to the average number of cases over the past four weeks (282 cases). However, there have been no signs of strain on the healthcare system yet.
Figure 11: Number of weekly COVID-19 cases by Region, as of week 30 (week ending on 28 July 2024), Viet Nam
(Source: General Department of Preventive Medicine, Ministry of Health, Viet Nam)

Note: A revision in the number of cases in the week 1 of 2024 has been made due to a backlog.

Countries in the temperate zone of the southern hemisphere

Australia – COVID-19 hospital admission and deaths (monthly update)
In week 30 (22-28 July), 5,849 new cases were reported, a decrease in new weekly cases for more than a month with 6,003 cases reported in week 29 followed by 7,167 cases reported in week 28. A total of 21 deaths were reported in week 30 as compared to 40 deaths in the previous week. The number of new admissions to ICU remained same as previous week at 13 (Figure 12).
Figure 12: COVID-19 confirmed cases, deaths and ICU cases, 1 January – 28 July 2024
(Source: International Health Regulations (IHR) National Focal Point, Australia)

* Notes: Due to a reduction in case ascertainment, including changes in testing and reporting requirements, notifications of COVID-19 are underestimated of disease incidence in the community. The completeness of information on COVID-19 associated deaths varies, as data is sourced in different ways by state and territories based on their local surveillance system capabilities, definitions, priorities, and needs. Data should be interpreted with caution as the way states and territories source and report COVID-19 associated deaths has also changed throughout the pandemic and may continue to change further. For more detail, please refer to reports and data considerations published by individual jurisdictions in Australia.

New Zealand – COVID-19 cases and deaths
Since the beginning of June until week 30 of 2024 (week ending on 28 July 2024), a decreasing trend was reported in COVID-19 cases in New Zealand with the 7-day-moving average of daily cases per 100 000 population at 4.7 cases on 28 July 2024 (Figure 13). The 7-day moving average of daily attributed deaths per 100 000 population remained at 0.02 deaths until 21 July 2024 (Figure 14).

Figure 13: 7-day moving average of daily cases per 100 000 population in New Zealand, 2023-2024
(Source: Te Whatu Ora, Health New Zealand)
Figure 14: 7-day moving average of daily COVID-19 attributed deaths per 100 000 population in New Zealand, 2023-2024
(Source: Te Whatu Ora, Health New Zealand)

Pacific Island Countries and Areas (PICs) – COVID-19 cases
From 15 – 21 July 2024, one out of 21 PICs reported COVID-19 cases: Commonwealth of the Northern Mariana Islands (Table 3). The 7-day rolling average of 11 PICs are shown in Figure 15.

Table 3: Weekly and cumulative number of COVID-19 cases and deaths in PICs, 15-21 July 2024
(Source: Pacific COVID-19 Weekly Epidemiological Update, WHO Division of Pacific Technical Support)
Global COVID-19 situation updates

Integrated influenza and other respiratory viruses surveillance outputs
COVID-19 monthly epidemiological updates
Global COVID-19 dashboard

Others:
- Report of the Review Committee regarding standing recommendations for COVID-19 [Link]
- Tracking SARS-CoV-2 variants [Link]
- JN.1 updated risk evaluation [Link]
## Annex 1. Summary of COVID-19 surveillance in countries and areas in the Western Pacific Region

<table>
<thead>
<tr>
<th>Countries/areas</th>
<th>Case definition</th>
<th>Surveillance system description</th>
<th>Reference</th>
</tr>
</thead>
</table>
| **Australia**   | Confirmed case: Newly diagnosed cases with laboratory definitive evidence  
• Laboratory definitive evidence: Detection of SARS-CoV-2 by nucleic amplification acid testing (NAAT); or isolation of SARS-CoV-2 in cell culture, with confirmation using a NAAT; or SARS-CoV-2 IgG seroconversion or a four-fold or greater increase in SARS-CoV-2 antibodies of any immunoglobulin subclass including 'total' assays in acute and convalescent sera, in the absence of vaccination.  
Probable case: Individuals who have laboratory suggestive evidence  
• Laboratory suggestive evidence: Detection of SARS-CoV-2 by rapid antigen testing (RAT). | COVID-19 is a **nationally notifiable disease**; The National Notifiable Diseases Surveillance System (NNDSS) coordinates national surveillance data for diseases on the National Notifiable Disease List. Every day, the state and territory health authorities report to the NNDSS about new cases of notifiable diseases.  
(Reporting) COVID-19 data includes both confirmed and probable cases reported to NNDSS. Six jurisdictions have stopped collecting probable cases: Victoria on 1 July 2023, Queensland on 1 September 2023, New South Wales on 1 October 2023, Western Australia on 9 October, NT on 21 October 2023 and ACT from 22 December 2023. Point of care tests administered in healthcare or aged care settings continue to be reported to the NNDSS by some jurisdictions. New South Wales ceased notification of hospitalization status for COVID-19 cases to the NNDSS on 5 March 2024. | 1, 2 |
| **China**       | Diagnosis should be made based on comprehensive analysis of epidemiological history, clinical manifestations and laboratory tests.  
• Have clinical manifestations associated with the 2019-nCoV infection;  
• Have one or more of the following pathogenic and serological result:  
  (1) A positive PCR detection of the 2019-nCoV;  
  (2) A positive antigen detection of the 2019-nCoV;  
  (3) A positive 2019-nCoV isolation and cultivation;  
  (4) Four times or more elevated levels of 2019-nCoV-specific IgG antibodies in the recovery phase than in the acute phase. | COVID-19 is a **class B notifiable disease**;  
(Case reporting) Medical institutions at all levels and in all categories should report cases in time according to regulations and laws, in line with relevant requirements for information reporting. COVID-19 infection and asymptomatic cases need to be reported directly on China’s network-based infectious disease reporting system within 24 hours of diagnosis. For severe, critical and death cases and other special cases identified, disease prevention and control agencies should conduct epidemiological investigations in a timely manner and upload results as required.  
(Pathogen monitoring) viral gene sequencing is analyzed for patient samples that test positive for COVID-19, which are collected from outpatients admitted to sentinel hospitals, severe and death cases in emblematic cities, as well as inbound travelers entering through emblematic ports.  
(Sentinel surveillance) outpatient influenza-like illness (ILI) and inpatient severe acute respiratory infection (SARI) cases will be monitored for COVID-19 in 554 sentinel hospitals for national influenza surveillance. | 3, 4, 5 |
<table>
<thead>
<tr>
<th>Country</th>
<th>Confirmed case: Laboratory confirmed cases using PCR or antigen-detecting rapid diagnostic tests</th>
<th>(Reporting) COVID-19 is a notifiable disease. Only severe and death cases are required to be reported, with outcomes (serious, critical, and death) within 28 days of the first positive specimen collection date.</th>
<th>COVID-19 is a category five sentinel disease; positive cases must be reported every week.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hong Kong SAR, China</td>
<td>Confirmed case: Laboratory confirmed cases using PCR or rapid/quantitative antigen test</td>
<td>(Clinical surveillance) Sentinel surveillance – positive cases from 5,000 sentinel sites at healthcare facilities for both Influenza and COVID-19; hospitalizations from 500 sentinel sites at healthcare facilities.</td>
<td>(Virological surveillance) SARS-CoV-2 genomic surveillance is conducted every week by the National Institute of Infectious Diseases in collaboration with commercial medical laboratories. Public health institutes at a prefectural level also conduct genomic surveillance for GISAID submission.</td>
</tr>
<tr>
<td>Japan</td>
<td>Confirmed case: Laboratory confirmed cases using PCR or rapid/quantitative antigen test</td>
<td>(Surveillance) COVID-19 surveillance system has been integrated into existing influenza-like illness (ILI), acute respiratory infection surveillance (ARI), and severe acute respiratory infection surveillance (SARI) system.</td>
<td>(Reporting) Weekly number of positive cases, hospitalizations (including those requiring ICU admission or mechanical ventilator), and variant data are reported.</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>Confirmed case: Laboratory confirmed cases using PCR or RAT</td>
<td>COVID-19 is a level four notifiable disease; positive cases must be reported within seven days of confirmation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Surveillance) COVID-19 surveillance system has been integrated into existing influenza-like illness (ILI), acute respiratory infection surveillance (ARI), and severe acute respiratory infection surveillance (SARI) system.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Reporting) Weekly detection rate from ILI and COVID-19 hospital admissions from ARI and SARI are reported as part of existing Weekly Infectious Disease Sentinel Surveillance Newsletter.</td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td>Suspected case: one of the following options</td>
<td>COVID-19 is a notifiable disease.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. A person who meets the clinical AND epidemiological criteria</td>
<td>COVID-19 surveillance has transitioned from exhaustive to sentinel surveillance using the existing influenza-like-illness (ILI) and severe acute respiratory infection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B. A patient with severe acute respiratory illness (SARI: acute respiratory infection with history of fever or measured fever</td>
<td></td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>
of 38°C; and cough; with onset within the last 10 days; and who requires hospitalization); C. An asymptomatic person not meeting epidemiological criteria with a positive SARS-CoV-2 rapid test kit antigen (RTK-Ag) 

Probable case: One of the following options
A. A patient who meets clinical criteria above AND is a contact of a probable or confirmed case or is linked to a COVID-19 cluster
B. A suspected case (described above) with chest imaging showing findings suggestive of COVID-19 disease
C. A person with recent onset of anosmia (loss of smell) or ageusia (loss of taste) in the absence of any other identified cause
D. Death, not otherwise explained, in an adult with respiratory distress preceding death AND who was a contact of a probable or confirmed case or linked to a COVID-19 cluster 

Confirmed case: One of the following options
A. A person with a positive NAAT; RT-PCR, Rapid Molecular, and Gene X-pert
B. A person with a positive SARS-CoV-2 RTK-Ag AND meeting either the probable case definition or suspected criteria (A) or (B)
C. An asymptomatic person with a positive SARS-CoV-2 RTK-Ag AND who is a contact of a probable or confirmed case

Exhaustive surveillance: COVID-19 is a notifiable disease under Section 74 of the Health Act 1956, which requires all health practitioners and those in charge of medical laboratories to officially report actual and suspected cases of COVID-19 to the medical officer of health in the local public health service. Self-diagnosed cases detected by RAT are not required to be reported under the Health Act. 

(Reporting) With widespread community transmission of SARS-CoV-2, reporting priorities to central communicable diseases units should include a) laboratory notification of positive NAAT results, b) self-reporting of positive RAT results, c) case demographics, d) clusters and outbreaks in high-risk settings and communities, e) cases in hospital and intensive care, and f) COVID-19 related deaths.
<table>
<thead>
<tr>
<th>Country</th>
<th>Suspected case: one of the following options</th>
<th>Confirmed case: one of the following options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viet Nam</td>
<td>a) A patient who presents symptoms of - fever and cough; or - at least three of following symptoms: fever; body aches; fatigue; chills; cough; headache; sore throat; runny nose; stuffy nose; reduced or lost sense of smell; reduced or lost sense of taste; nausea; vomiting; diarrhea; shortness of breath. b) A patient with severe acute respiratory illness (SARI) or severe viral pneumonia (SVP).</td>
<td>a) Laboratory confirmed cases using PCR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b) Suspected case (described above) with a positive result of a positive SARS-CoV-2 rapid test kit antigen</td>
</tr>
<tr>
<td></td>
<td>Since October 2023, COVID-19 has been classified as a group B notifiable disease and monitored through the Electronic Communicable Disease Reporting System (eCDS), managed by the Ministry of Health. Both suspected and confirmed cases are required to be reported to eCDS within 24 hours from the time of diagnosis.</td>
<td></td>
</tr>
<tr>
<td>Cook Islands</td>
<td>Confirmed case: Laboratory definitive evidence, satisfying one of the following:</td>
<td>Exhastive surveillance</td>
</tr>
<tr>
<td></td>
<td>• Detection of SARS-CoV-2 from a clinical specimen using a validated NAAT (PCR)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Detection of coronavirus from a clinical specimen using pan-coronavirus NAAT (PCR) and confirmation as SARS-CoV-2 by sequencing</td>
<td></td>
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<tr>
<td></td>
<td>• Significant rise in IgG antibody level to SARS-CoV-2 between paired sera (when serological testing becomes available).</td>
<td></td>
</tr>
<tr>
<td>Fiji</td>
<td>Confirmed case: Meeting one of the following criteria:</td>
<td>COVID-19 test results are reported from multiple laboratories from multiple sites (sentinel and non-sentinel).</td>
</tr>
<tr>
<td></td>
<td>• A person with a positive RT-PCR or Gene Expert Test</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• A person with a positive SARS-CoV-2 Ag-RDT AND meeting either the probable case definition or suspected criteria</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• An asymptomatic contacts of a positive/probable case with a positive SARS-CoV-2 Ag-RDT</td>
<td></td>
</tr>
</tbody>
</table>
### Guam

**Confirmed case:** Meeting one of the following confirmatory laboratory evidence
- Detection of SARS-CoV-2 ribonucleic acid (RNA) in a post-mortem respiratory swab or clinical specimen using a diagnostic molecular amplification test performed by a Clinical Laboratory Improvement Amendments (CLIA)-certified provider, OR
- Detection of SARS-CoV-2 by genomic sequencing

**COVID-19 test results are reported from multiple laboratories (non-sentinel) at varying times of the day. The Joint Information Center reports cumulative results once a day, unless available.**
Bi-weekly COVID-19 Situation Update
2 August 2024

References:

13. Decision 3985/QD-BYT 2023 guiding COVID19 surveillance and prevention (thuvienphapluat.vn)
14. Circular 54/2015/TT-BYT on the regime of information on reporting and declaration of the latest infectious diseases (thuvienphapluat.vn)
15. WHO Division of Pacific Technical Support (DPS)