Situation Update #164 - Coronavirus Disease 2019 (COVID-19)
WHO Country Office for Nepal
Reporting Date: 29 May – 4 June 2023 (Epi Week 22)

HIGHLIGHTS
(Data published in the MoHP Situation Report as of 4 June 2023 and same data published in EDCD Report as of 5 June 2023)

- Of the total RT-PCR confirmed COVID-19 cases, 98.8% of cases have recovered, 0.01% (33) are active cases, and 1.19% (12,031) are deaths.
- Among the new RT-PCR confirmed cases (16) reported this week, 18.8% (3 cases) are from Udayapur district while 12.5% (2 cases) are from Kathmandu district and Nuwakot district. Two cases (12.5%) have been reported from Kathmandu Valley (Kathmandu, Lalitpur, and Bhaktapur) in Bagmati Province.

COVID-19 vaccination coverage status (as of 30 May 2023)

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>First dose</th>
<th>Second dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covi-AstraZeneca</td>
<td>5,586,627</td>
<td>4,839,821</td>
</tr>
<tr>
<td>Vero Cell</td>
<td>10,409,528</td>
<td>9,278,219</td>
</tr>
<tr>
<td>Janssen</td>
<td>3,548,417</td>
<td></td>
</tr>
<tr>
<td>Pfizer</td>
<td>5,027,073</td>
<td>3,880,316</td>
</tr>
<tr>
<td>Moderna</td>
<td>3,228,669</td>
<td>2,830,970</td>
</tr>
</tbody>
</table>

NEPAL EPIDEMIOLOGICAL SITUATION
- Since 9 May 2021, all 7 provinces in the country are experiencing community transmission.
- Since the start of the COVID-19 pandemic, a total of 78.2% (784,775/1,003,343) of RT-PCR confirmed cases were reported from three provinces, namely - Koshi, Bagmati and Lumbini Provinces. The Kathmandu Valley area (Kathmandu, Bhaktapur, Lalitpur) in Bagmati Province has substantially high case load with 44.2% of the national total (443,059/1,003,343), and 81.4% of the provincial total (443,059/544,300).
- Province-wise, RT-PCR test positivity rate in Epi week 22 ranged from 0.0% (Gandaki Province) to 20.0% (Koshi Province) with a national positivity rate at 1.9%. Madhesh and Karnali Provinces did not report any RT-PCR test performed in the last week.
- Nepal reported a 52% decrease in the number of new RT-PCR confirmed cases (n=16) in Epi week 22 compared to that in the previous week. Of these total cases reported last week, 81% of the cases have been reported from Koshi and Bagmati Provinces.
- Nepal reported no death in Epi week 22, same as in the previous week.
National Influenza Surveillance

- Nepal Influenza Center (NIC)-NPRL reported 10 diagnostic Influenza samples on Epi week 22 (29 May-4 June 2023).
  - None of the samples tested positive for Influenza and SARS-CoV-2.
- NIC-NPRL received 15 Influenza samples from sentinel hospitals on Epi week 22.
  - None of the samples tested positive for Influenza and SARS-CoV-2.
- Provincial Public Health Laboratories (PPHLs) reported testing of 72 samples for Influenza-SARS-CoV-2 using Multiplex kit on Epi week 22.
  - None of the samples tested positive for Influenza.
  - Two samples tested SARS-CoV-2 positive.
  - A total of 2159 samples have been tested by PPHLs from 2 Jan to 4 Jun 2023.
- From 2 January 2023 until 4 Jun 2023:
  - A total of 526 samples tested positive for Influenza [(67 Influenza B (not determined), 61 Influenza B Victoria, 356 Influenza A/H3, 42 Influenza A(H1N1)pdm09] from 4278 samples (sentinel and non-sentinel SARI and ILI samples).
  - Similarly, 207 samples tested positive for SARS-CoV-2 from dual testing of Influenza and SARS-CoV-2 in 3876 SARI and ILI samples.¹

WHO SEAR countries: Number of COVID-19 confirmed cases and cumulative incidence rate (per 100,000). Link Here- https://worldhealthorg.shinyapps.io/covid/

¹ These positive cases are included in the COVID-19 database
At the national level, the first wave of cases between July 2020 and February 2021 was followed by the second wave from the middle of March 2021. Since the middle of December 2021, a third wave of cases soared up exceeding the highest number of single day cases reported in the past surges towards the end of January 2022. Another wave of cases steadily soared up towards the middle of May 2022 following an overall declining trend since the middle of August 2022. Since the middle of March 2023, cases were soaring up, however the trend is continuously decreasing since the end of April 2023.
The cumulative case incidence has been increasing in Nepal since the first case confirmed on 23 January 2020. Cases have been largely reported from Bagmati Province followed by Koshi and Lumbini Province.

Figure 3A1: RT-PCR confirmed COVID-19 cases in Province 1: Trend of Cases, 7 days Rolling Average, Weekly Cases and Deaths and Test Positivity Rate (Data reported on 4 June 2023)

There were 9 new cases reported in the past week in Koshi Province. Cases have decreased by 63% in the past week compared to that in the previous week. There was no death reported in the past week, same as in the previous week. The test positivity rate in Koshi Province decreased to 20.0% in the past week. A total of 25 tests were performed in the past week, 62% less than that in the previous week.
There was no new case reported in the past week in Madhesh Province, same as in the previous week. There was no death reported in the past week, same as in the previous week. There was no test performed reported in the past week.

Figure 3A3: RT-PCR confirmed COVID-19 cases in Bagmati Province: Trend of Cases, 7 days Rolling Average, Weekly Cases and Deaths and Test Positivity Rate (Data reported on 4 June 2023)
In Bagmati Province, 4 new cases were reported in the past week. Cases have decreased by 50% in the past week compared to that in the previous week. There was no death reported in the past week, same as in the previous week. The test positivity rate in Bagmati Province increased to 0.8% in the past week. A total of 1311 tests were performed in the past week, 21% less than that in the previous week.

Figure 3A4: RT-PCR confirmed COVID-19 cases in Gandaki Province: Trend of Cases, 7 days Rolling Average, Weekly Cases and Deaths and Test Positivity Rate (Data reported on 4 June 2023)

In Gandaki Province, 2 new cases were reported in the past week, an increase compared to none in the previous week. There was no death reported in the past week, same as in the previous week. The test positivity rate in Gandaki Province retained at 0.0% in the past week. A total of 8 tests were performed in the past week, 65% less than that in the previous week.
In Lumbini Province, no new case was reported in the past week, same as in the previous week. There was no death reported in the past week, same as in the previous week. The test positivity rate in Lumbini Province was 9.1% in the past week. A total of 11 tests were performed in the past week, compared to none reported in the previous week.
In Karnali Province, no new case was reported in the past week, same as in the previous week. There was no death reported in the past week, same as in the previous week. There was no test performed reported in the past week.

Figure 3A7: RT-PCR confirmed COVID-19 cases in Sudurpaschim Province: Trend of Cases, 7 days Rolling Average, Weekly Cases and Deaths and Test Positivity Rate (Data reported on 4 June 2023)

In Sudurpaschim Province, 1 new case was reported in the past week, same as in the previous week. There was no death reported in the past week, same as in the previous week. The test positivity rate in Sudurpaschim Province was 0.0% in the past week. A total of 22 tests were performed in the past week, compared to none reported in the previous week.
**Table 1: Summary of confirmed COVID-19 cases, deaths, and transmission by Provinces** *(Data reported on 4 June 2023 up to 19:00:00)*

<table>
<thead>
<tr>
<th>Reporting Province</th>
<th>Total confirmed cumulative cases RTPCR Tests</th>
<th>Total Confirmed cumulative cases Antigen RDT test</th>
<th>Total confirmed cumulative cases</th>
<th>% of total confirmed cumulative cases</th>
<th>Total cumulative deaths</th>
<th>Transmission classification</th>
<th>Total confirmed cases in last 14 days Antigen RDT test</th>
<th>Total confirmed cases in last 14 days RT-PCR test</th>
<th>Total confirmed cases in last 14 days</th>
<th>% of total confirmed cumulative cases in last 14 days</th>
<th>Total Deaths in last 14 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Koshi</td>
<td>129861</td>
<td>30391</td>
<td>160252</td>
<td>14.1</td>
<td>1722</td>
<td>Community transmission</td>
<td>1</td>
<td>33</td>
<td>34</td>
<td>34.7</td>
<td>0</td>
</tr>
<tr>
<td>Madhesh</td>
<td>53929</td>
<td>1187</td>
<td>55116</td>
<td>4.9</td>
<td>783</td>
<td>Community transmission</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>Bagmati</td>
<td>544300</td>
<td>33405</td>
<td>577705</td>
<td>50.9</td>
<td>5210</td>
<td>Community transmission</td>
<td>15</td>
<td>12</td>
<td>27</td>
<td>27.6</td>
<td>0</td>
</tr>
<tr>
<td>Gandaki</td>
<td>95547</td>
<td>24880</td>
<td>120427</td>
<td>10.6</td>
<td>1430</td>
<td>Community transmission</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td>6.1</td>
<td>0</td>
</tr>
<tr>
<td>Lumbini</td>
<td>110614</td>
<td>28499</td>
<td>139113</td>
<td>12.3</td>
<td>1874</td>
<td>Community transmission</td>
<td>16</td>
<td>0</td>
<td>16</td>
<td>16.3</td>
<td>0</td>
</tr>
<tr>
<td>Karnali</td>
<td>24041</td>
<td>6450</td>
<td>30491</td>
<td>2.7</td>
<td>492</td>
<td>Community transmission</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>4.1</td>
<td>0</td>
</tr>
<tr>
<td>Sudurpashchim</td>
<td>45051</td>
<td>6546</td>
<td>51597</td>
<td>4.5</td>
<td>520</td>
<td>Community transmission</td>
<td>9</td>
<td>2</td>
<td>11</td>
<td>11.2</td>
<td>0</td>
</tr>
<tr>
<td><strong>National Total</strong></td>
<td><strong>1003343</strong></td>
<td><strong>131358</strong></td>
<td><strong>1134701</strong></td>
<td><strong>100</strong></td>
<td><strong>12031</strong></td>
<td>Community transmission</td>
<td><strong>49</strong></td>
<td><strong>49</strong></td>
<td><strong>98</strong></td>
<td><strong>100</strong></td>
<td><strong>0</strong></td>
</tr>
</tbody>
</table>

*Total reported in Health Emergency Operation Center (HEOC) Sitrep as of 04 June 154033, IMU reported 131358*

Notes:
1. The source for the case data used in this update is from RT-PCR test positivity reported by laboratories from various locations across Nepal, as shared by HEOC Sitrep; and IMU/IHIMS.
2. Case data is screened and cleaned by our data team for double entry, wrong entries and manual errors such as city names in place of districts, district names in place of province etc.
3. Whereas the test positivity rate is calculated based on the test positivity reported in Sitrep for RT-PCR which may or may not be scrutinized or cleaned the same way and mark the cases on location of the laboratories rather than their place of residence.
Overall, the sex-distribution remains skewed towards males. The incidence of cases is higher in the economically productive age group (15-54 years) for both males and females.

Table 2: Age Specific Case Fatality Ratio and Co-morbidity of Deaths in RT-PCR confirmed COVID-19 cases (N= 1003343)(Data reported on 4 June 2023 up to 19:00:00)

<table>
<thead>
<tr>
<th>Age Group (Years)</th>
<th>Total confirmed cases</th>
<th>Death (male)</th>
<th>Death (female)</th>
<th>Deaths with any known comorbid condition</th>
<th>Age specific case fatality ratio (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>9352</td>
<td>16</td>
<td>23</td>
<td>13</td>
<td>0.42</td>
</tr>
<tr>
<td>5-14</td>
<td>34235</td>
<td>13</td>
<td>7</td>
<td>10</td>
<td>0.06</td>
</tr>
<tr>
<td>15-24</td>
<td>151797</td>
<td>92</td>
<td>97</td>
<td>71</td>
<td>0.12</td>
</tr>
<tr>
<td>25-34</td>
<td>278340</td>
<td>388</td>
<td>265</td>
<td>152</td>
<td>0.23</td>
</tr>
<tr>
<td>35-44</td>
<td>206749</td>
<td>875</td>
<td>452</td>
<td>281</td>
<td>0.64</td>
</tr>
<tr>
<td>45-54</td>
<td>144626</td>
<td>1398</td>
<td>646</td>
<td>577</td>
<td>1.41</td>
</tr>
<tr>
<td>55-64</td>
<td>92349</td>
<td>1692</td>
<td>803</td>
<td>784</td>
<td>2.7</td>
</tr>
<tr>
<td>65-74</td>
<td>50089</td>
<td>1641</td>
<td>894</td>
<td>959</td>
<td>5.06</td>
</tr>
<tr>
<td>75-84</td>
<td>23671</td>
<td>1229</td>
<td>660</td>
<td>775</td>
<td>7.98</td>
</tr>
<tr>
<td>85+</td>
<td>6898</td>
<td>524</td>
<td>290</td>
<td>280</td>
<td>11.8</td>
</tr>
<tr>
<td>Unknown</td>
<td>5237</td>
<td>19</td>
<td>7</td>
<td>11</td>
<td>0.5</td>
</tr>
<tr>
<td>National</td>
<td>1003343</td>
<td>7887</td>
<td>4144</td>
<td>3913</td>
<td>1.20</td>
</tr>
</tbody>
</table>

*Case Fatality ratio (CFR, in%) = \( \frac{\text{Number of deaths from disease}}{\text{Number of confirmed cases of disease}} \times 100 \)

COVID-19 positive lab result is temporally associated with death; causal association under investigation.
A total of 12,031 deaths have been reported. Out of the total deaths, 7,887 (65.6%) were male and 4,144 (34.4%) were female. Amongst the deaths, 3,913 persons (32.5%) had at least one known comorbidity. The age specific case fatality ratio (CFR) progressively increases with age, ranging from 0.06% to 11.8%.

**PREPAREDNESS AND RESPONSE**

**What are the Government of Nepal (GoN) & the Ministry of Health & Population (MoHP) doing?**

- From 3 November 2022 onwards, the Government of Nepal has started administering second dose COVID-19 booster vaccination for people aged 55 years and above and the vulnerable population group (immune-deficiency/chronic patients, pregnant women, and health workers).

**What is the WHO Country Office for Nepal doing?**

**Laboratory Diagnosis**

- WHO Nepal has been providing support to the NPHL in continued routine work.
- WHO Nepal provided technical support to National Public Health Laboratory (NPHL) for the “Onsite monitoring and review meeting of Influenza and SARS-CoV-2 Surveillance network at Bheri Hospital” on 31 May-1 June 2023. The meeting was held to review the ongoing Influenza and SARS-CoV-2 surveillance activities in Bheri Hospital. The staff representing Bheri Hospital, NPHL, and WHO attended the meeting.

**Technical Expertise and Training**

- Continued routine work from the team of Technical Expertise and Training.²
- WHO provided technical and financial support to the National Health Training Center (NHTC) to conduct a two-day service providers training on Acute Respiratory Distress Syndrome (ARDS) Management at Seti Provincial Hospital in Dhangadhi, Kailali from 4 to 5 June 2023. There were 8 trainers and 16 participants which included doctors and nursing staffs from Dadeldhura Hospital, Seti Provincial Hospital-Dhangadhi, Mahakali Provincial Hospital-Kanchanpur, Tikapur Hospital-Kailali, District Hospital - Bajhang, District Hospital-Bajura, Nisarga Hospital, Mayometro Hospital, and Navajeevan Hospital-Dhangadhi. The training was coordinated by chief of curriculum development.

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² The routine works of the technical expertise and training team included technical support to the Ministry of Health and Population and its department for developing different guidelines/manuals, conducting health programs, and conducting capacity building activities. To perform these activities, the team coordinates and discuss with relevant government authorities and partners for effective planning and conducting the various activities.
The main aim of the program was to increase the capacity of the participants on management of acute respiratory distress syndrome.

WHO Nepal provided technical and financial support for the provincial-level dissemination program of National Infection Prevention and Control (IPC) Guideline and sharing of IPC manual held in Biratnagar on 4 June 2023. Organized by the Nursing and Social Security Division (NSSD), Department of Health Services, the program saw participation of the Health Secretary, director of Provincial Health Directorate (PHD) and director of Provincial Health Training Center (PHTC) of Koshi Province along with acting director of PHD of Madhesh Province. Medical superintendents and representatives of federal, provincial, and district-level hospitals of Koshi and Madhesh Provinces along with academics also attended the dissemination program.

Mr Shravan Nayak, Acting Director of Province Health Directorate (PHD) Madhesh Province delivering his remarks. Photo credit: WHO Nepal
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WHO Country Office for Nepal
Friday 9 June 2023

Provincial-level dissemination program of National IPC Guideline held in Biratnagar on 4 June 2023. Photo credit: WHO Nepal

**Operational Support and Logistics**
- Continued routine work from the team of Operation Support and Logistics.³

**Risk Communication and Community Engagement**
- *Weekly COVID-19 EPI Dashboard* was uploaded on ReliefWeb (link [here](https://reliefweb.int/sites/reliefweb.int/files/resources/)) and WHO, Country Office for Nepal, website (link [here](https://www.who.int/nepal)).
- The *Weekly WHO Nepal COVID-19 Situation Update* was uploaded on ReliefWeb (link [here](https://reliefweb.int/sites/reliefweb.int/files/resources/)) and WHO, Country Office for Nepal, website (link [here](https://www.who.int/nepal)).
- The *Focused COVID-19 and Health Media Monitoring* was uploaded on ReliefWeb (link [here](https://reliefweb.int/sites/reliefweb.int/files/resources/)).

**What are the health clusters partners doing?**
- Continued routine work from the team of Partner Coordination and Donor Relation⁴

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³ The routine works of the operation support and logistics team included technical support to the Management Division of the Department of Health Services for the forecasting, quantification, procurement, and distribution plan of COVID-19 commodities. The other routine activities included daily operational support to the WHO country office and seven provincial health emergency operation centers, including fleet and travel management and the procurement of required logistics and supplies.

⁴ The routine works include coordinating with all the divisions, units, centers of Ministry of Health and Population (MoHP) and Department of Health Services (DoHS), and the health partners for effective conduction of Health Cluster Coordination meeting. Furthermore, the works included the documentation and distribution of meeting minutes, health partner’s support updates in the 3Ws (Who, What, Where) and thematic mapping, updates of WHO’s support in the UNRCO 3W sheet, participate in multi-sectoral and emergency and disaster preparedness and response platforms and activities and the humanitarian country team operational meetings. Moreover, necessary support for effective coordination of Health Emergency Operation Centre (HEOC) with different stakeholders is provided.
• UNICEF and WHO are providing overall support for COVID-19 vaccination in close coordination with health partners and donors.
• All members of the Health Cluster are supporting the COVID-19 vaccination campaign of Nepal.
• Health partners are continuing their technical, operational, and logistics support for COVID-19 responses to health-related offices and institutions throughout the country.
• COVID-19 consultation is being provided continuously by specialist teams through tele-medicine services.

WHO’s STRATEGIC OBJECTIVES FOR COVID-19 RESPONSE- link here
RECOMMENDATION AND ADVICE FOR THE PUBLIC
- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

USEFUL LINKS
• MoHP COVID-19 official portal is available here.
• Nepal COVID-19 regular updates and resources are available here.
• For COVID-19 updates from the WHO South-East Asia Region Office, please visit here.
• For information about coronavirus disease (COVID-19) from WHO, please visit here.
• Please visit this site for all technical guidance from WHO.
• Online courses on COVID-19 from WHO can be found here.
• WHO Coronavirus (COVID-19) Dashboard can be found here.
• Visit the WHO Nepal Facebook page and webpage on COVID-19 here.

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