Situation Update #140 - Coronavirus Disease 2019 (COVID-19)
WHO Country Office for Nepal

Reporting Date: 12 – 18 December 2022
(EPI Week 50)

HIGHLIGHTS
(Data published in the MoHP Situation Report as of 18 December 2022 and same data published in EDCD Report as of 19 December 2022)

- Of the total RT-PCR confirmed COVID-19 cases, 98.8% (988,916) of cases have recovered, 0.003% (11) are active cases and 1.2% (12,019) are deaths.
- Among the new RT-PCR confirmed cases (14) reported this week, 42.9% (6) are from Kathmandu district followed by 14.3% (2) from Lalitpur and 14.3% (2) from Baglung districts. Majority of the new cases 57.1% (8) have been reported from Kathmandu Valley (Kathmandu, Lalitpur and Bhaktapur) and Bagmati Province.

COVID-19 vaccination coverage status (as of 13 December 2022)

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>First dose</th>
<th>Second dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cov-AstraZeneca</td>
<td>5,561,491</td>
<td>4,818,496</td>
</tr>
<tr>
<td>Vero Cell</td>
<td>10,383,480</td>
<td>9,254,603</td>
</tr>
<tr>
<td>Janssen</td>
<td>3,532,668</td>
<td></td>
</tr>
<tr>
<td>Pfizer</td>
<td>4,801,372</td>
<td>3,540,196</td>
</tr>
<tr>
<td>Moderna</td>
<td>3,225,750</td>
<td>2,828,387</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% (782,706/1,000,946) of RT-PCR confirmed cases were reported from three provinces, namely- Province 1, Bagmati Province and Lumbini Province. The Kathmandu valley area (Kathmandu, Bhaktapur, Lalitpur) in Bagmati Province has substantially high case load with 44.1% of the national total (441,627/1,000,946), and 81.4% of the provincial total (441,627/542,700).
- Province-wise RT-PCR test positivity rate in Epi Week 50 ranged from 0.0% (Lumbini Province) to 4.8% (Province 1), with a national positivity rate at 0.7%. Madhesh, Karnali and Sudurpashchim Provinces did not report any RT-PCR test performed in the last week.
- Nepal reported a 39% decrease in the number of new RT-PCR confirmed cases (n=14) in Epi week 50 compared to that in the previous week. Of these total cases reported last week, 79% of the cases have been reported from Province 1, Bagmati, and Lumbini Province.
- Nepal did not report any death in Epi week 50, same as in the previous week.
National Influenza Surveillance

- National Influenza Center (NIC)-NPHL reported 10 Diagnostic Influenza samples on EPID-week 50 (12-18 Dec 2022). Two samples tested Influenza A/H3 positive. None of the samples tested positive for SARS-CoV-2.
- NIC-NPHL received 17 samples from its sentinel sites i.e. Sukraraj Tropical and Infectious Disease Hospital (STIDH) (15 samples) and Tribhuvan University Teaching Hospital (TUTH) (2 samples) for Influenza-SARS-CoV-2 testing. None of the samples tested positive for Influenza or SARS-CoV-2.
- Out of the total SARS-CoV-2 samples that tested negative at NPHL on Epi-week 50, 14 samples were tested for Influenza. None of the samples tested positive for Influenza A or B.
- Provincial Public Health Laboratory (PPHL) from Madhesh, Gandaki, and Karnali Provinces reported testing of 49 samples for Influenza-SARS-CoV-2 using Multiplex kit on Epi-week 50.
  - None of the samples tested positive for Influenza A or B or SARS-CoV-2
  - A total of 1893 samples have been tested by PPHLs till 18 December 2022
- From 3 January 2022 until 18 December 2022:
  - A total of 690 samples tested positive for Influenza (5 Influenza B, 326 Influenza A/H3, 359 Influenza A(H1N1pdm09) from 7,689 samples (sentinel and non-sentinel samples including SARS-CoV-2 negative SARI and ILI cases).
  - Similarly, 365 samples tested positive for SARS-CoV-2 from 3,271 Influenza negative samples (sentinel/non-sentinel ILI/SARI samples).

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

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1 These positive cases are included in the COVID-19 database
Figure 1: RT-PCR confirmed COVID-19 cases and average number of COVID-19 cases over the last seven days, by date of onset/sample/confirmation (N= 1000946) (Data reported on 18 December 2022 up to 19:00:00)

At 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.

Figure 2: Cumulative case count of RT-PCR confirmed COVID-19 cases (N= 1000946) (Data reported on 18 December 2022 up to 19:00:00)
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 Province 1 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 18 December 2022)

There was 1 new case reported in the past week in Province 1. Cases have decreased by 50% in the past week compared to the previous week. There was no death reported in the past week, same as in the previous week. The test positivity rate in Province 1 increased to 4.8% in the past week. A total of 21 tests were performed in the past week, 50% more than that in the previous week.

Figure 3A2: RT-PCR confirmed COVID-19 cases in Madhesh Province: Trend of Cases, 7 days Rolling Average, Weekly Cases and Deaths and Test Positivity Rate (Data reported on 18 December 2022)
There was no new case reported in the past week in Madhesh province. Cases have decreased by 100% in the past week compared to 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 18 December 2022)

In Bagmati, 10 new cases were reported in the past week. Cases have decreased by 38% in the past week compared to the previous week. There was no death reported in the past week, same as in the previous week. The test positivity rate in Bagmati decreased to 0.6% in the past week. A total of 2040 tests were performed in the past week, 31% less than that in the previous week.
In Gandaki, 3 new cases were reported in the past week. Cases have increased by 200% in the past week compared to the previous week. There was no death reported in the past week, same as in the previous week. The test positivity rate in Gandaki increased to 3.3% in the past week. A total of 30 tests were performed in the past week, 36% more than that in the previous week.

Figure 3A5: RT-PCR confirmed COVID-19 cases in Lumbini Province: Trend of Cases, 7 days Rolling Average, Weekly Cases and Deaths and Test Positivity Rate (Data reported on 18 December 2022)
Lumbini reported no new case 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 retained at 0.0% in the past week. A total of 5 tests were performed in the past week, 29% less than that in the previous week.

Figure 3A6: RT-PCR confirmed COVID-19 cases in Karnali Province: Trend of Cases, 7 days Rolling Average, Weekly Cases and Deaths and Test Positivity Rate (Data reported on 18 December 2022)

In Karnali, 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.
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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 18 December 2022)

In Sudurpaschim, 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.
### Table 1: Summary of confirmed COVID-19 cases, deaths and transmission by provinces (Data reported on 18 December 2022 up to 19:00:00)

<table>
<thead>
<tr>
<th>Reporting Province</th>
<th>Total confirmed 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>Province 1</td>
<td>129517</td>
<td>30322</td>
<td>159839</td>
<td>14.1</td>
<td>1722</td>
<td>Community transmission</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>7.3</td>
<td>0</td>
</tr>
<tr>
<td>Madhesh</td>
<td>53901</td>
<td>1178</td>
<td>55079</td>
<td>4.9</td>
<td>783</td>
<td>Community transmission</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>9.8</td>
<td>0</td>
</tr>
<tr>
<td>Bagmati</td>
<td>542700</td>
<td>32764</td>
<td>575464</td>
<td>50.9</td>
<td>5202</td>
<td>Community transmission</td>
<td>2</td>
<td>26</td>
<td>28</td>
<td>68.3</td>
<td>0</td>
</tr>
<tr>
<td>Gandaki</td>
<td>95369</td>
<td>24669</td>
<td>120038</td>
<td>10.6</td>
<td>1428</td>
<td>Community transmission</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>12.2</td>
<td>0</td>
</tr>
<tr>
<td>Lumbini</td>
<td>110489</td>
<td>28140</td>
<td>138629</td>
<td>12.3</td>
<td>1874</td>
<td>Community transmission</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2.4</td>
<td>0</td>
</tr>
<tr>
<td>Karnali</td>
<td>24019</td>
<td>6325</td>
<td>30344</td>
<td>2.7</td>
<td>492</td>
<td>Community transmission</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>Sudurpashchim</td>
<td>44951</td>
<td>6142</td>
<td>51093</td>
<td>4.5</td>
<td>518</td>
<td>Community transmission</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td><strong>National Total</strong></td>
<td><strong>1000946</strong></td>
<td><strong>129540</strong></td>
<td><strong>1130486</strong></td>
<td><strong>100</strong></td>
<td><strong>12019</strong></td>
<td>Community transmission</td>
<td><strong>4</strong></td>
<td><strong>37</strong></td>
<td><strong>41</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 11 December 152215, IMU reported 129540*

Notes:
1. The source for 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 entry and manual errors such as cities name in place of districts, district name 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.
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Figure 4: Distribution of RT-PCR positive COVID-19 cases by age and sex (N= 995709) (Data reported on 18 December 2022 up to 19:00:00)

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= 1000946) (Data reported on 18 December 2022 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 co-morbid condition</th>
<th>Age specific case fatality ratio (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>9320</td>
<td>16</td>
<td>23</td>
<td>13</td>
<td>0.42</td>
</tr>
<tr>
<td>5-14</td>
<td>34179</td>
<td>13</td>
<td>7</td>
<td>10</td>
<td>0.06</td>
</tr>
<tr>
<td>15-24</td>
<td>151416</td>
<td>92</td>
<td>96</td>
<td>70</td>
<td>0.12</td>
</tr>
<tr>
<td>25-34</td>
<td>277608</td>
<td>387</td>
<td>265</td>
<td>151</td>
<td>0.23</td>
</tr>
<tr>
<td>35-44</td>
<td>206305</td>
<td>875</td>
<td>452</td>
<td>281</td>
<td>0.64</td>
</tr>
<tr>
<td>45-54</td>
<td>144347</td>
<td>1396</td>
<td>645</td>
<td>574</td>
<td>1.41</td>
</tr>
<tr>
<td>55-64</td>
<td>92148</td>
<td>1690</td>
<td>803</td>
<td>782</td>
<td>2.71</td>
</tr>
<tr>
<td>65-74</td>
<td>49915</td>
<td>1640</td>
<td>893</td>
<td>957</td>
<td>5.07</td>
</tr>
<tr>
<td>75-84</td>
<td>23600</td>
<td>1228</td>
<td>659</td>
<td>773</td>
<td>8</td>
</tr>
<tr>
<td>85+</td>
<td>6871</td>
<td>524</td>
<td>289</td>
<td>279</td>
<td>11.83</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>1000946</td>
<td>7880</td>
<td>4139</td>
<td>3901</td>
<td>1.20</td>
</tr>
</tbody>
</table>

Case Fatality ratio (CFR, in%) = Number of deaths from disease / Number of confirmed cases of disease × 100

COVID-19 positive lab result is temporally associated with death; causal association under investigation.
A total of 12,019 deaths have been reported. Out of the total deaths, 7,880 (65.6%) were male and 4,139 (34.4%) were female. Amongst the deaths, 3,901 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, the Government of Nepal has started administering COVID-19 second dose of booster vaccination for people aged 55 and above and the vulnerable population (immune-deficiency/chronic patients, pregnant women, and health workers) group.

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

**Laboratory Diagnosis**

- WHO Nepal has been providing technical support to the National Public Health Laboratory (NPHL) in the following activities:
  - Monitoring the quality standard of designated COVID-19 laboratories in the country through the National Quality Assurance Program (NQAP). A total of 4 designated COVID-19 laboratories participated in the NQAP this week. The result of all participating laboratories was 100% concordant.
  - Conducting the annual meeting on Influenza SARS-CoV-2 sentinel surveillance in Nepal to review the year’s activities of the National Influenza Surveillance Network (NISN) and discuss issues and challenges faced during the implementation phase. A total of 60 participants attended the meeting held on 16 December 2022. The first NISN newsletter was also launched at the meeting.
  - Restoration of culture and subculture facility of Influenza virus at NIC-NPHL
  - Preparation of SOP for Proficiency testing of Influenza and SARS-CoV-2 using Multiplex-RT PCR kit

**Technical Expertise and Training**

- Continued routine work from the team of Technical Expertise and Training²
  - WHO Nepal provided technical and financial support in conducting the following programs:
    - A four-day training on Pediatric Essential Critical Care Training (PECCT) organized by the National Health Training Centre (NHTC) at Paropakar Maternity and Women's Hospital in Kathmandu from 16 to 19 December 2022. A team of 8 trainers trained 16 participants which included doctors and nursing staff from COVID-19 designated hospitals from Province 1 and Bagmati Province.
    - A two-day pilot training on Acute Respiratory Distress Syndrome (ARDS) management organized by NHTC from 18 to 19 December 2022 at the National Trauma Center.

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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.
Kathmandu. A team of 9 trainers and 15 participants from Bagmati Province were part of the training.

- A six-day training on Essential Critical Care Training (ECCT) organized by NHTC began from 18 December 2022 in Bir Hospital, Kathmandu. A total of 12 participants including Doctors and nurses from Madhesh, Lumbini and Bagmati Provinces are being trained.

- A three-day service provider’s training on Infection Prevention and Control (IPC) organized by NHTC was conducted at Western Regional Hospital in Pokhara from 13 to 15 December 2022. A total of 19 participants which included nursing staff from all district level hospital of Gandaki Province (except Manang, Mustang and Nawalpur) were trained.

- A 3-month blended modality training on IPC organized by the Nursing and Social Security Division (NSSD) and certified by NHTC was successfully completed on 15 December 2022. Twenty nurses working in different tertiary level hospitals of all seven provinces participated in the training.
**Operational Support and Logistics**
- Continued routine work from the team of Operation Support and Logistics.

**Risk Communication and Community Engagement**
- The new episode of *Paanch Maa Bigyaan*, on public health emergency of international concern, was shared via SoundCloud (link [here](#)), Facebook (link [here](#)), and Twitter (link [here](#)). A promotional poster was also shared via Facebook (link [here](#)), Twitter (link [here](#)), and Instagram (link [here](#)).
- The web story of the completion of Nepal's first-ever Joint External Evaluation (JEE) for the International Health Regulation (IHR) was shared via Facebook (link [here](#)), Twitter (link [here](#)), Instagram (link [here](#)), and website (link [here](#)). The JEE assessed Nepal's capacities to prevent, detect, and respond to public health risks; identify critical gaps; and prioritize areas for multi-sectoral action for enhanced preparedness and response for potential future health emergencies. Nepal is the second country in the world to complete the JEE-IHR utilizing the 3rd edition of the JEE tool which was revised to incorporate COVID-19 lessons and recommendations of the IHR review committee.
- On the occasion of *Universal Health Coverage*, relevant IEC materials were shared which highlighted its importance during health crises. IEC materials on topics including "How to stay safe from flu during the winter"*, "Safe celebrations and COVID-19", "Physical activity and COVID-19" and "Preventive measures for COVID-19" were also shared via social media.
- The following documents were uploaded on ReliefWeb (link [here](#)):
  i. Weekly COVID-19 EPI Dashboard,
  ii. Focused COVID-19 and Health Media Monitoring, and
- Continued support provided to MoHP for its weekly media briefing. The briefing held on 14 December 2022 presented the national update on COVID-19, the importance of PHSM, vaccine coverage, the risk of influenza (flu), and safety measures during winter. An important message on Universal Coverage Day was also broadcasted during the briefing. The briefing is live-streamed every Wednesday at 4:15 PM on Nepal Television and MoHP's Official Facebook page and WHO Nepal's social platforms.

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

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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 campaign 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) Pandemic 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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