

# EPIDEMIOLOGICAL SITUATION COVID-19, Nepal



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## Epidemiological update on COVID-19 situation in Nepal - 28 May 2020

**Top line summary: COVID-19 transmission in Nepal is still largely restricted to large clusters of returning migrants. Although there may be a few cases without a clear travel history, there is little evidence of widespread community transmission. However, number of cases is increasing rapidly and is expected to rise even further as more migrant Nepalese workers will be returning across the southern border in coming days to weeks. New districts in the mountain regions are being affected indicating that some amount of community transmission might have started, which is being investigated. So far, aggressive testing albeit with significant scope for strategic improvement, has helped identify and confine the transmission at the border municipalities but testing capacity as well as isolation and quarantine facilities and contact tracing mechanisms are being stretched to the limit.**

### COVID-19 update

- The COVID-19 pandemic with more than five million cases and more than 300,000 deaths globally (WHO Global situation report 26 May 2020) has become an unprecedented public health challenge for all countries.
- As of date, Nepal has confirmed 1042 cases through polymerase chain reaction (PCR) and five deaths. This report is based on 1031 cases for which core data is available. Of the 1031 cases, 99% (1 016) of confirmed cases are asymptomatic at the time of sample collection or diagnosis.
- The first case was confirmed by the WHO reference laboratory at the School of Public Health, University of Hong Kong on 23 January 2020 in a Nepalese student returning from Wuhan, China. There was no secondary spread from this case as the case was isolated and all close contacts traced and followed-up with none developing symptoms of the disease.

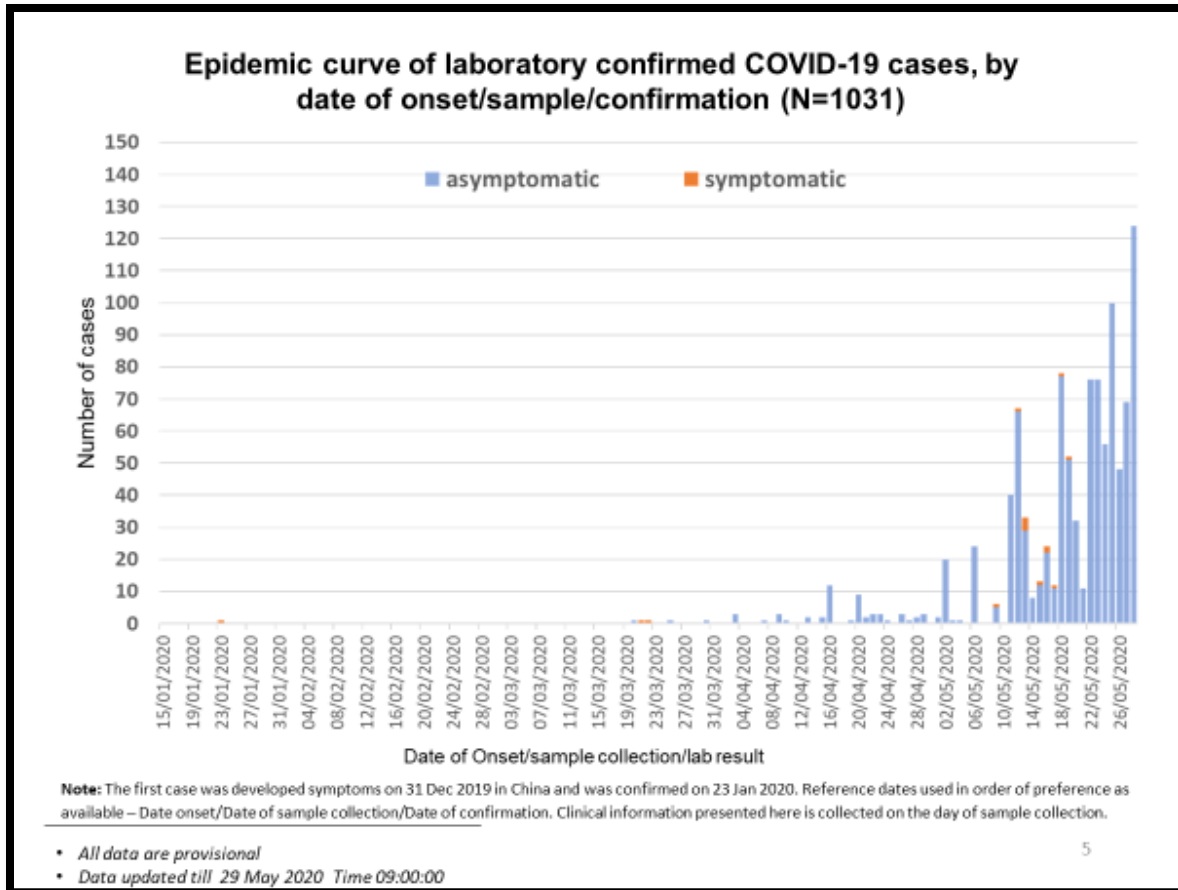


Figure 1: COVID-19 daily incident cases by symptom at presentation

- Nearly two months after this first case, from 20 March 2020 and thereafter, sporadic cases started occurring in Nepal as confirmed at the National Public Health Laboratory (NPHL), Nepal. [Figure 1]
- Government of Nepal announced nationwide lockdown from 24 March 2020 and domestic flights were suspended. International flights were suspended from 23 March 2020.
- Until mid-April confirmed COVID-19 (PCR positive) cases were detected sporadically but they were largely confined to persons returning or visiting from foreign countries.
- Starting third week of April and later, clusters of cases were detected. Initially in province-1 (at Udaipur – 28 cases) and in province-2 (Bara, Parsa and Rautahat – 2 each). Other than Rautahat, these clusters were associated with community religious events or congregations in India and Nepal.
- From around 10 May 2020, as the national lock down in India was gradually being relaxed (started on 23 March), number of returnees crossing the southern border increased and many cases were confirmed amongst these returnees mainly in province 2 and province 5.
- **The returning migrant workers and their accompanying family members have been confined to quarantine centres and those testing positive isolated in border municipalities and districts thus**

effectively preventing widespread community transmission to other municipalities inside the country.

- **Aggressive testing irrespective of symptoms in such high-risk groups and locations has played a part in the prevention of apparent seeding of infection. More than 50,000 PCR tests have been conducted.** [<https://covid19.mohp.gov.np/#/> accessed on 28 May 2020 0900]
- This staccato step-wise progression of case counts is largely driven by large number of imported cases detected amongst returning migrant workers through the testing mechanism deployed. Many of them were residing in the western part of India which has turned out to be a hot spot of community wide transmission of COVID-19 and were presumably infected there. [Figure 2 and Figure 3]
- Forty-nine out of 77 districts have been affected. In Bagmati Province, all but one district has been affected.
- The increase in the number of positive cases and their profile reflects mainly the testing approach, i.e. the targeting of recently arrived returnees from India. Only few people have tested positive outside this group.

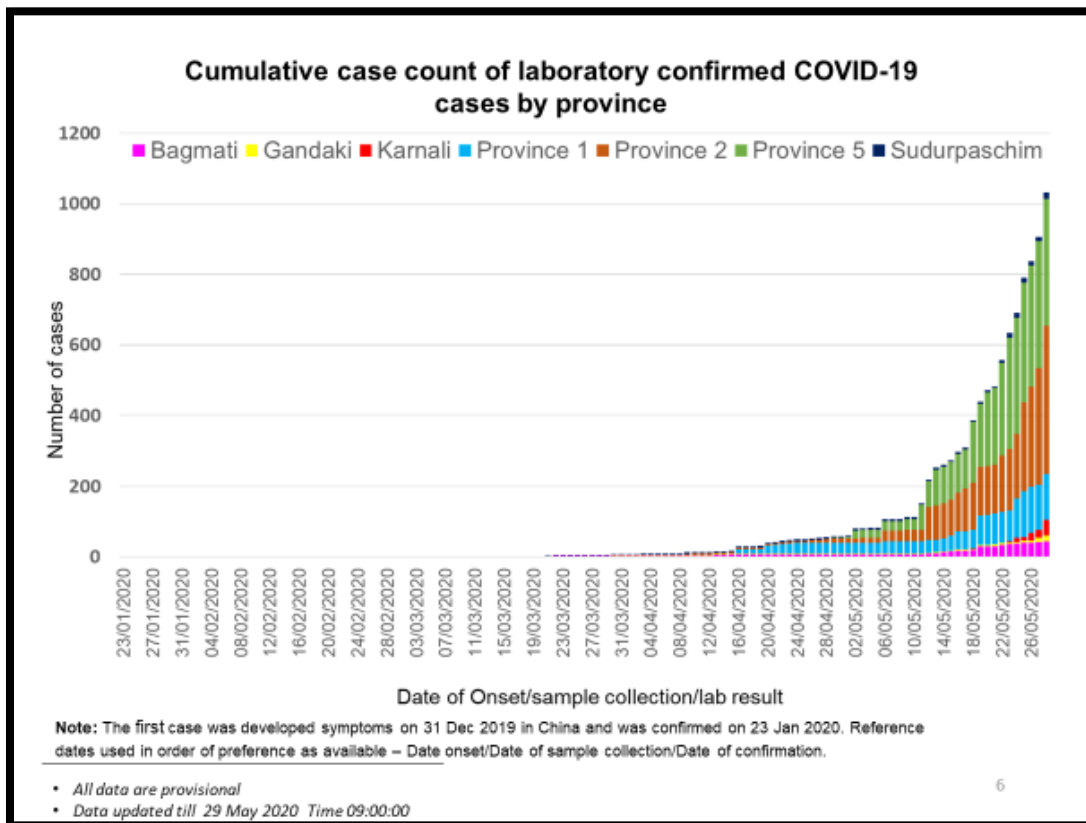
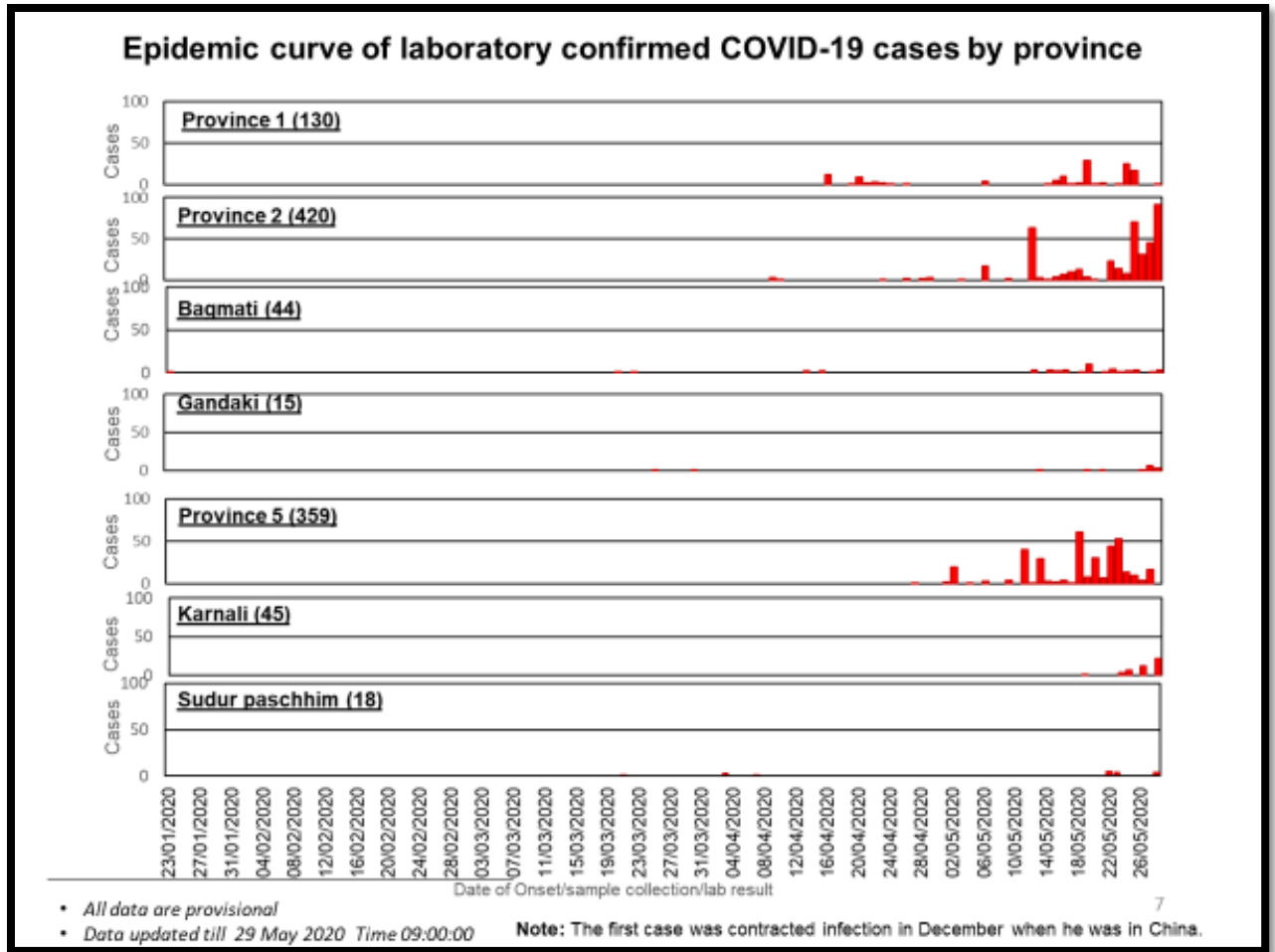


Figure 2: Cumulative incidence of COVID-19 confirmed cases by province

- Since the third week of May, Bagmati province has also shown a smaller spurt of cases detected through focussed testing of certain perceived risk groups and locations. These cases are being investigated to identify their source of transmission.



*Figure 3: Province wise epi-curve of confirmed COVID-19 cases*

- The geographic distribution shown below demonstrates clustering within some municipalities. [Figure 4]
- The age sex distribution is highly skewed towards males, who constitute 90% of the confirmed cases. Of the males, 92% are in 15-54-year age group, indicating that these large increases in confirmed cases are occurring because of large groups of infected migrant workers (who are predominantly males in economically productive age group) returning to Nepal. [
- Figure 5]

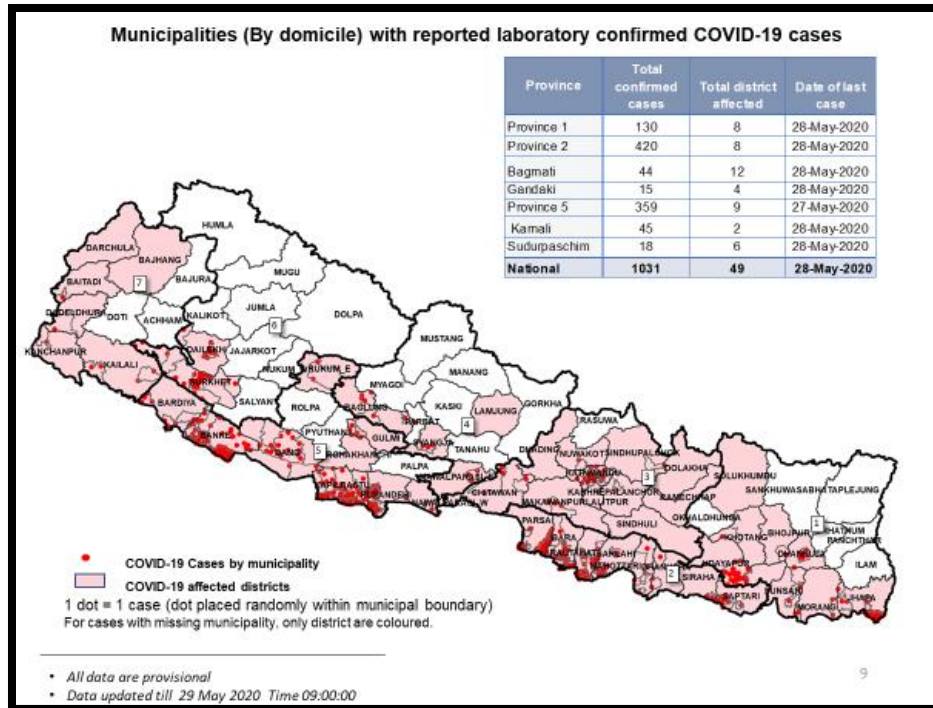


Figure 4: Geographic distribution of cases by place of confirmation or residence

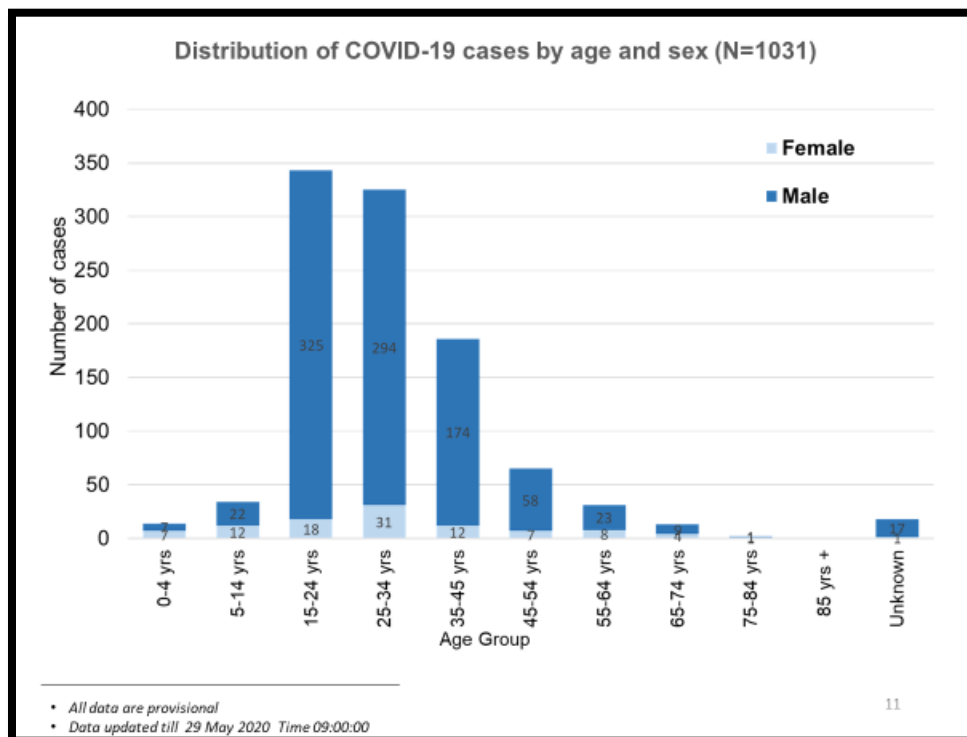


Figure 5: Age-sex distribution of confirmed COVID-19 cases

- Currently, all PCR positive cases irrespective of presence or absence of symptoms are isolated in designated hospitals.
- They are discharged on clinical recovery if symptomatic or after 14 days of isolation and after two consecutive samples taken at least 24 hours apart test negative by PCR.
- One hundred thirty-eight persons have “recovered” / discharged, and five persons have died.
- Seventeen persons 2% have reported one or more co-morbidities while a large number (969 (94%) remain under investigation. [Figure 6]

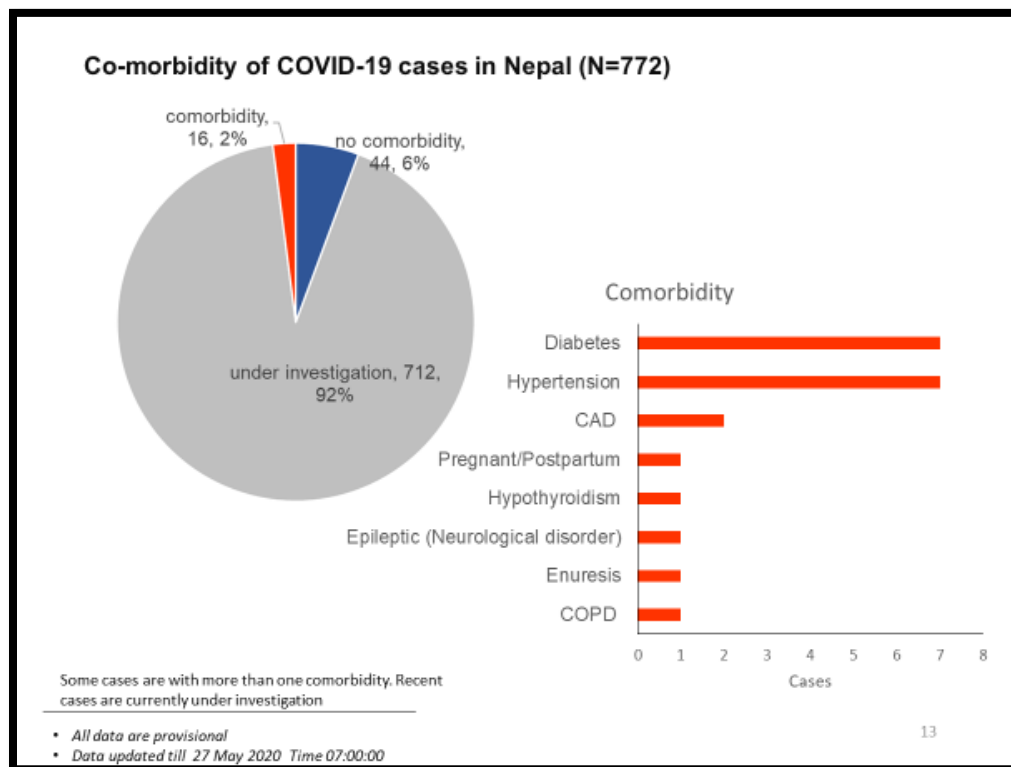


Figure 6: Co-morbidities in confirmed COVID-19 cases

## ILI / SARI update

- Since January 2020 until 21 May 2020, 586 cases of influenza like illness (ILI) and severe acute respiratory infection (SARI) have been tested for SARS-CoV2 and five have tested positive (1 in January and 4 in March). All five have been included in the COVID-19 confirmed cases list.
- All samples received for influenza cases after the lockdown are also tested for COVID.
- Early warning alert and response system (EWARS plus) module has been developed in the HMIS system for daily reporting of the SARS, ILI, and suspected COVID cases with facility for lab samples collection.
- However, there is need to have case-based record for samples sent to testing for rt-PCR for all SARI/ILI and suspected COVID-19 cases. There is also a need to improve the reporting rates of the participating EWARS sites.