

# Situation Update #25 - Coronavirus Disease 2019 (COVID-19)

WHO Country Office for Nepal

Wednesday 7 October 2020

## HIGHLIGHTS

- High case load observed in the Kathmandu District that is contributing to the significantly high level of contribution to the national case load by Kathmandu valley and the Bagmati province
- Over half of the active cases in the country are currently home isolated
- The proportion of exposed persons in institutional quarantine is less than half of those institutionally isolated
- Home quarantine and isolation is posing problems in following up the clinical status
- Teams for case investigation and contact tracing; and arrangements for additional isolation, intensive care and ventilatory beds need to be ramped up rapidly in Kathmandu valley to manage the case surge
- The imminent festival season and the large volume of travel out of the Kathmandu valley need special attention in terms of risk communication and safe public transport travel arrangements to mitigate the risk of spread of infection

## SITUATION OVERVIEW

### NEPAL

*(Data as of 7 October 2020, 07:00:00 hours)*

**90813 confirmed cases**

**562 deaths**

**10,99,276 RT-PCR tests (As of 6 October 2020)**

### SOUTH-EAST ASIA REGION

*(Data as of 10am CEST 4 October 2020)*

**73,35,273 confirmed cases**

**1,19,167 deaths**

### GLOBAL

*(Data as of 10am CEST 4 October 2020)*

**3,48,04,348 confirmed cases**

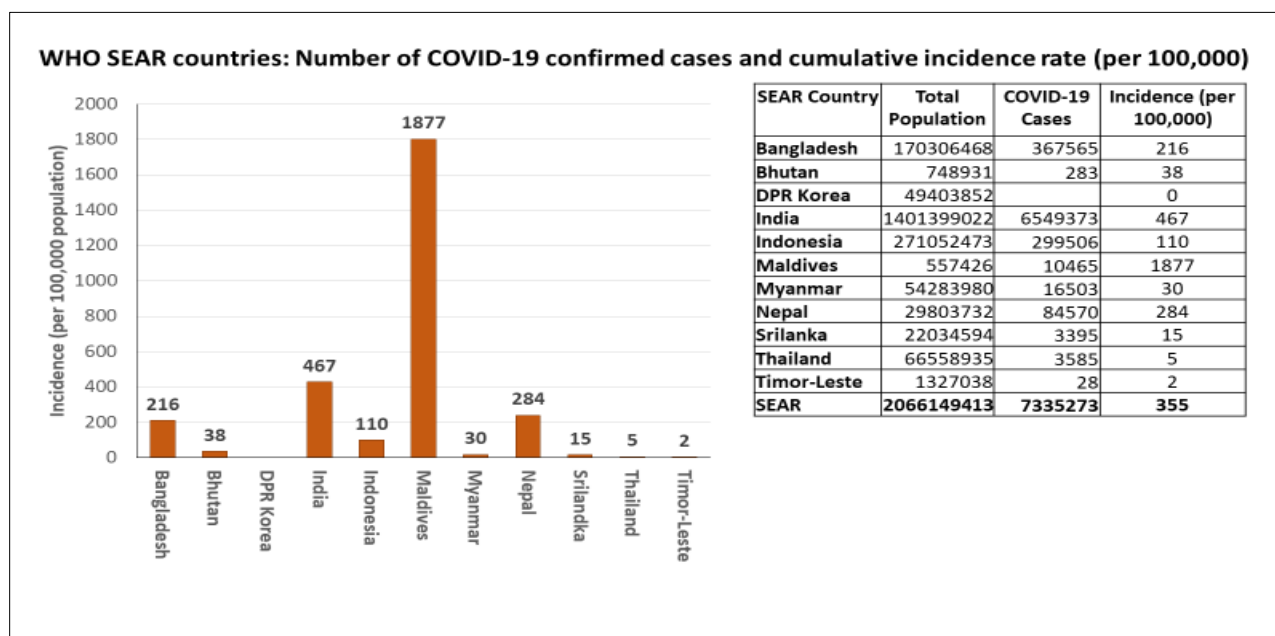
**10,30,738 deaths**

## NEPAL EPIDEMIOLOGICAL SITUATION

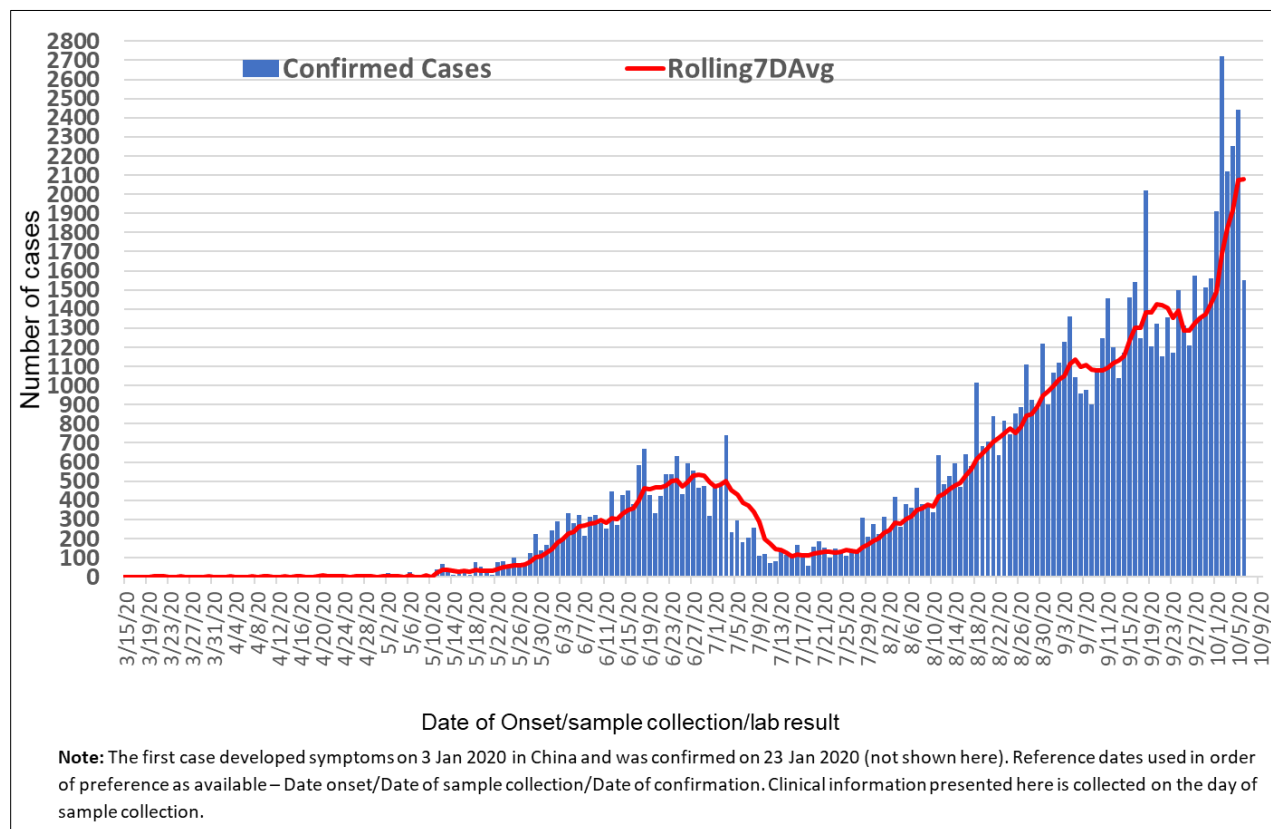
- As of 7 October 2020, 07:00 hours, (Week no. 41), a total 90813 COVID-19 cases were confirmed in the country through polymerase chain reaction (RT-PCR). All 7 provinces and 77 districts have reported one or more cases since beginning of the COVID-19 epidemic in Nepal.
- In the last 14 days, 24182 cases were reported which constitutes 26.6 % of total confirmed cases in the country. Out of total 77 districts, 3 districts, namely – Manang, Dolpa and Mustang did not report any COVID-19 cases in the last 14 days.
- The transmission pattern in 6 provinces are in the stage of cluster transmission, except Gandaki where it's sporadic. Bagmati province is showing significant increase in 7-day rolling average case incidence, total cases were reported in Bagmati province -38376 (42.3% of total cases).

- Observed doubling time -- 3 days doubling time in April which gradually lengthened to 6 days, 10 Days , 18 days and up to 49 days. On 22 Sep, the case count crossed 65536 mark, the most recent national doubling time for case count is 28 days and reported 66631 cases.
- Total 72.9 % (66149/90813) of total cases were reported from 3 provinces, namely- Province 2, Bagmati and Province-5. The Kathmandu valley area (Kathmandu, Bhaktapur, Lalitpur) in Bagmati province is experiencing high case load with 35.3 % of national total (32065/90813), and 83.5 % of the provincial total (32065/38376). From week 36-40, the Kathmandu valley reported 63.2% of National case load (24091/38088).
- Overall, the gender distribution remains skewed towards males, who constitute 71.3% (64834/90813) of the confirmed cases; and amongst the males, 85.6% (55524/64834) are in the economically productive age group (15-54-years).
- As of date, there are total 562 deaths. Out of 562 deaths, 394 (70.2%) were male and 168 females. Amongst the deaths, 382 persons (65.6%) had at least one or more known co-morbid conditions. All deaths occurred in the country between weeks 20 and 41. Although the overall case fatality ratio (CFR) across all ages is less than 1 per cent, it progressively increases with age beyond 65 years of age in the range of 5% to 11%.
- Fifteen samples were received for Influenza on EPID-week 40 (28th Sept - 4th Oct 2020) and all tested negative for Influenza. On EPID-week 39 (21- 27 Sep 2020), one sample was tested positive for influenza. Hence, from January until 4th Oct 2020, 718 Samples have been tested for Influenza and SARS-CoV-2. Total of 19 influenza negative samples have tested positive for SARS-CoV-2 and included in COVID-19 database samples that fit the case definition of SARI. ILI/SARI data and Influenza laboratory results are updated in FLUID and FLUNET.

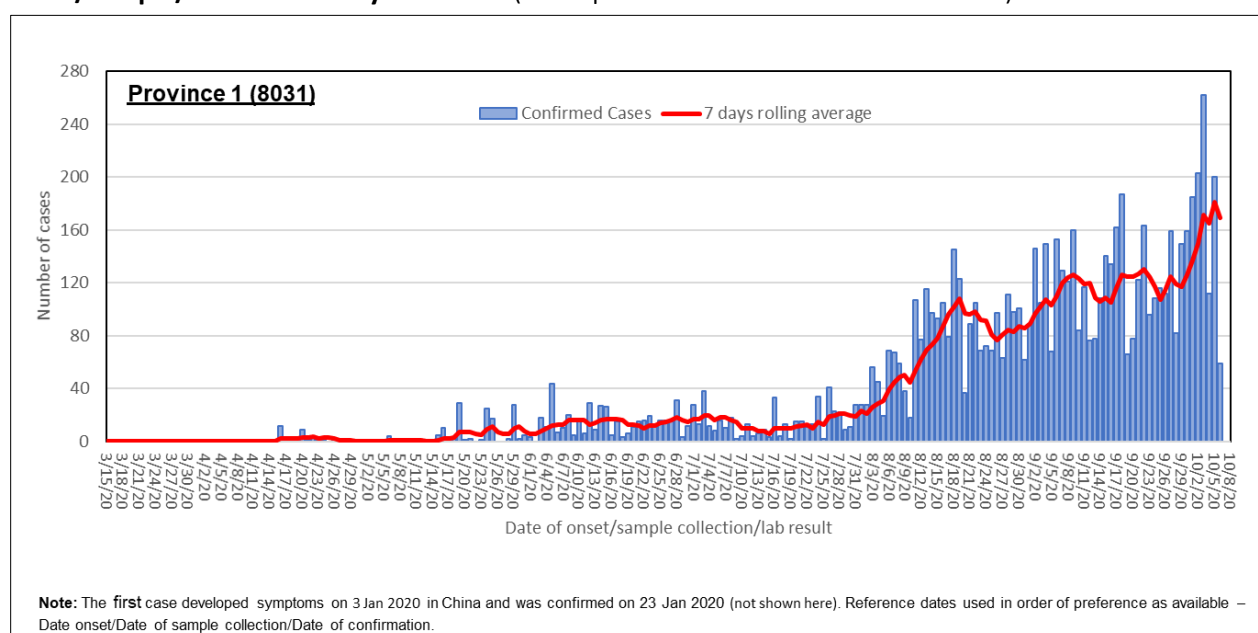
**Figure 1: WHO SEAR countries: Number of COVID-19 confirmed cases (data as of 4 October 2020 from #Global Weekly Epidemiological Update 8) and cumulative incidence rate (per 100,000)**

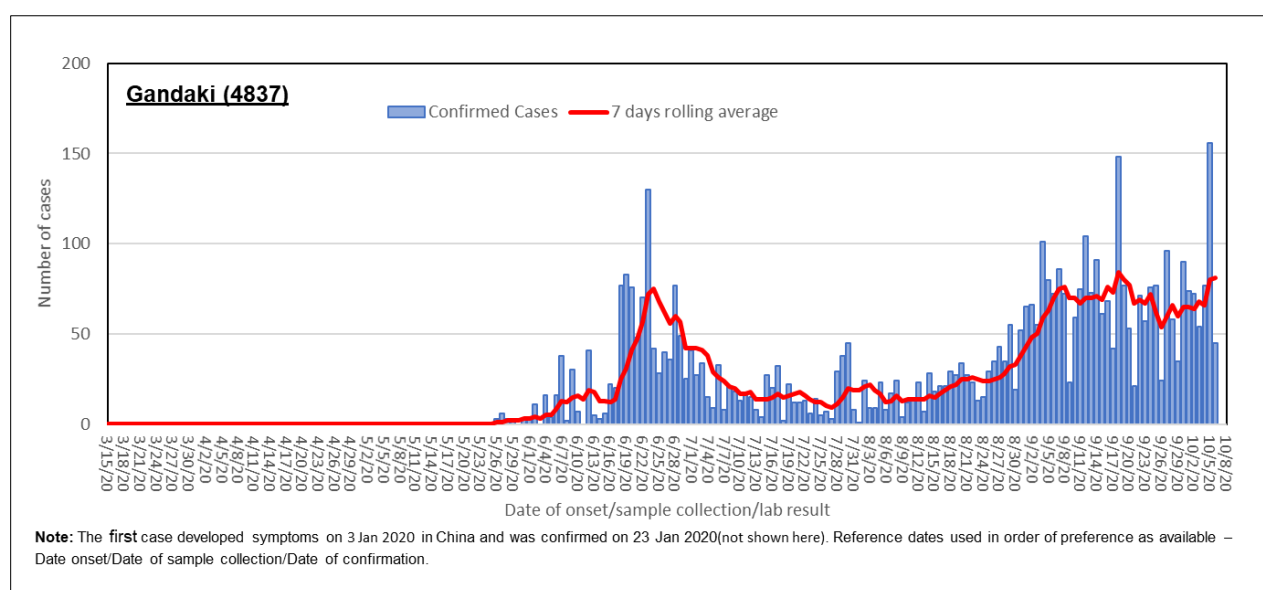
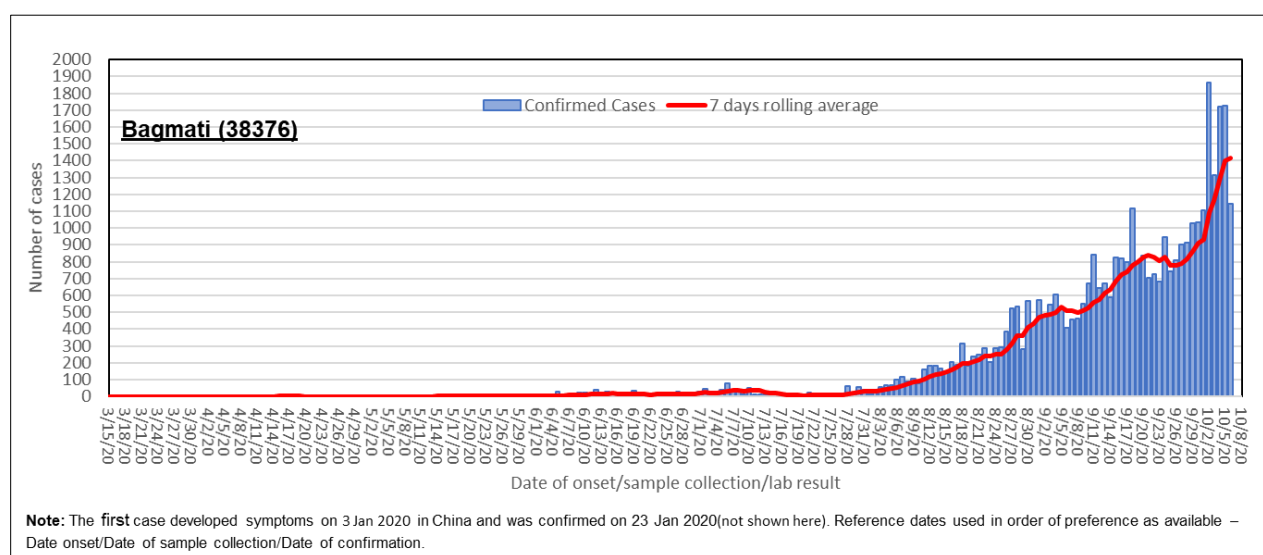
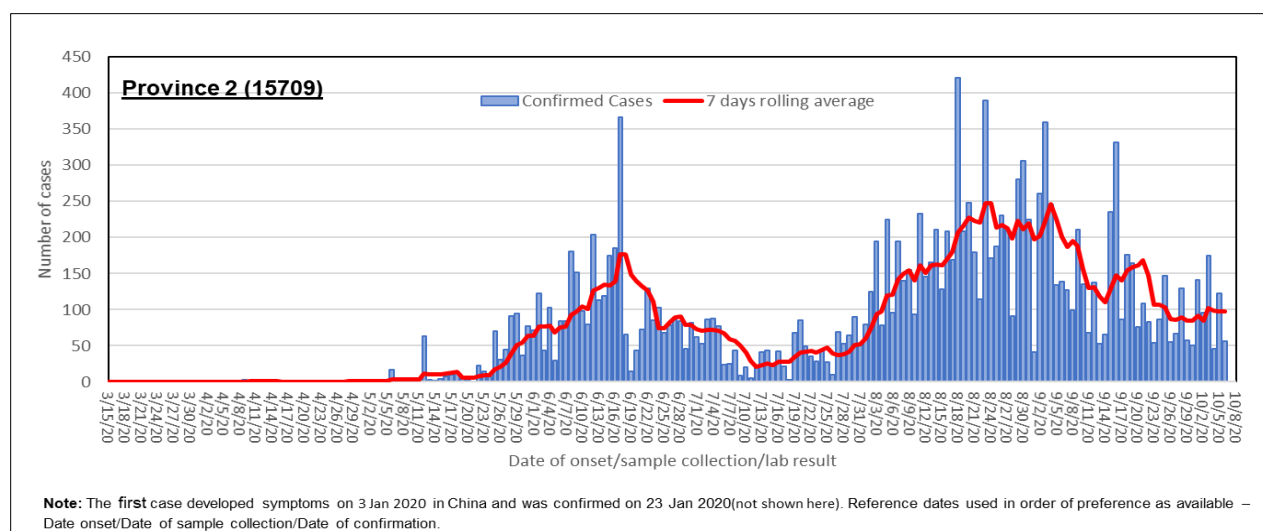


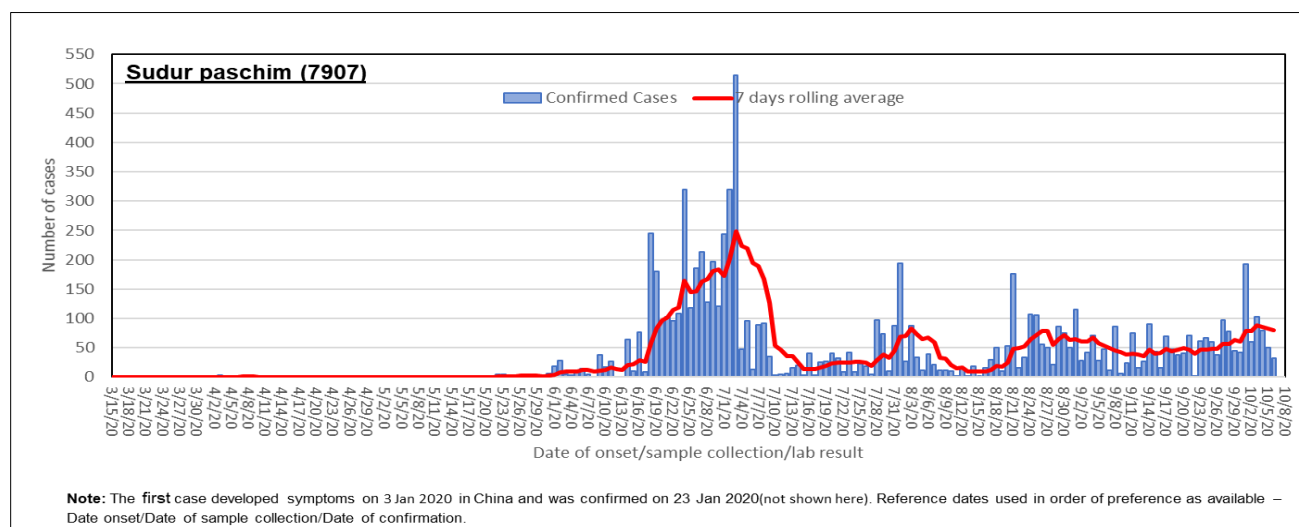
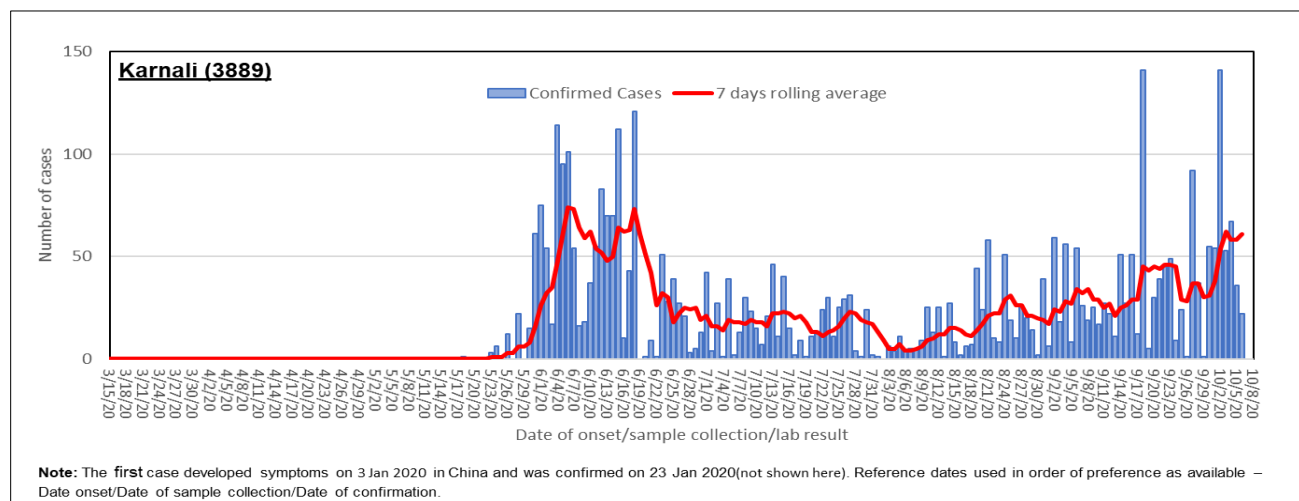
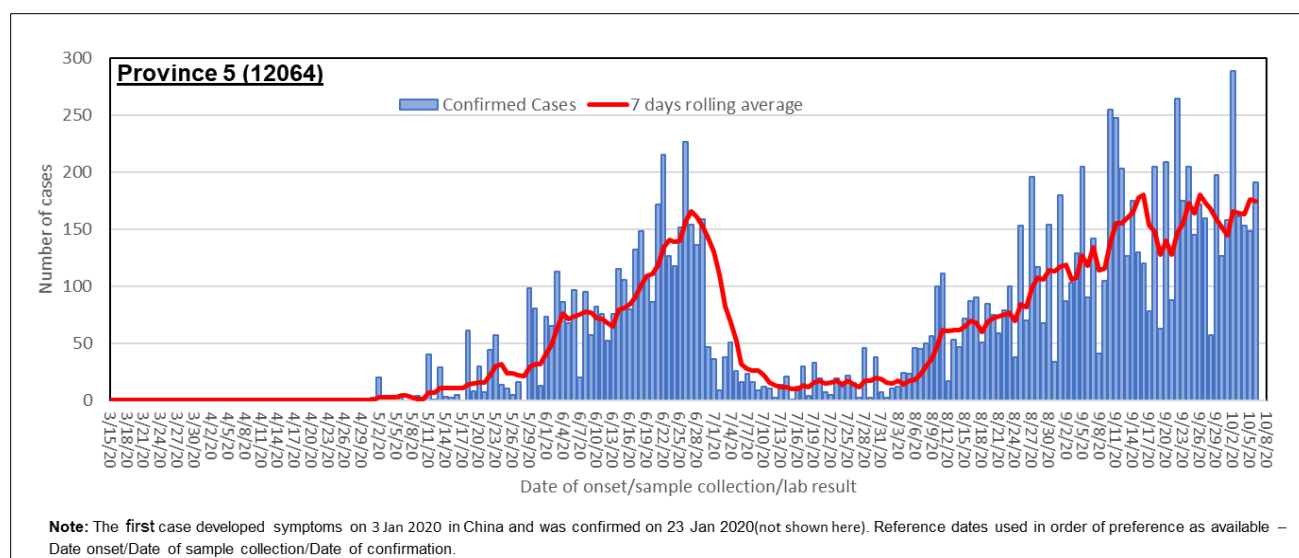
**Figure 2 A: Laboratory confirmed COVID-19 cases and average number of COVID-19 cases over the last seven days, by date of onset/sample/confirmation (N = 90813)** (Data updated on 07 October 2020 T07:00:00)



**Figure 2B: Lab confirmed COVID-19 cases and a 7-day rolling average of cases by date of onset/sample/confirmation by Provinces** (Data updated on 07 October 2020 T07:00:00)





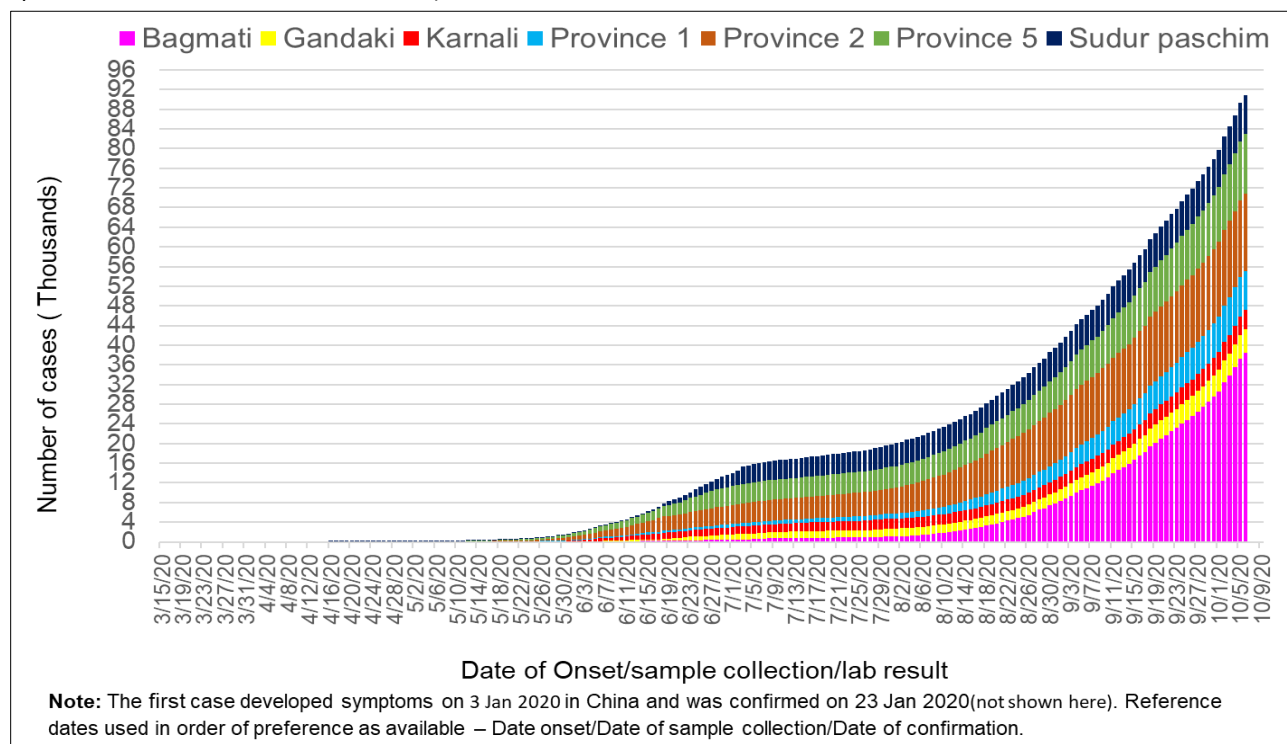


**Note for all the Provinces (Figure 2 B):**

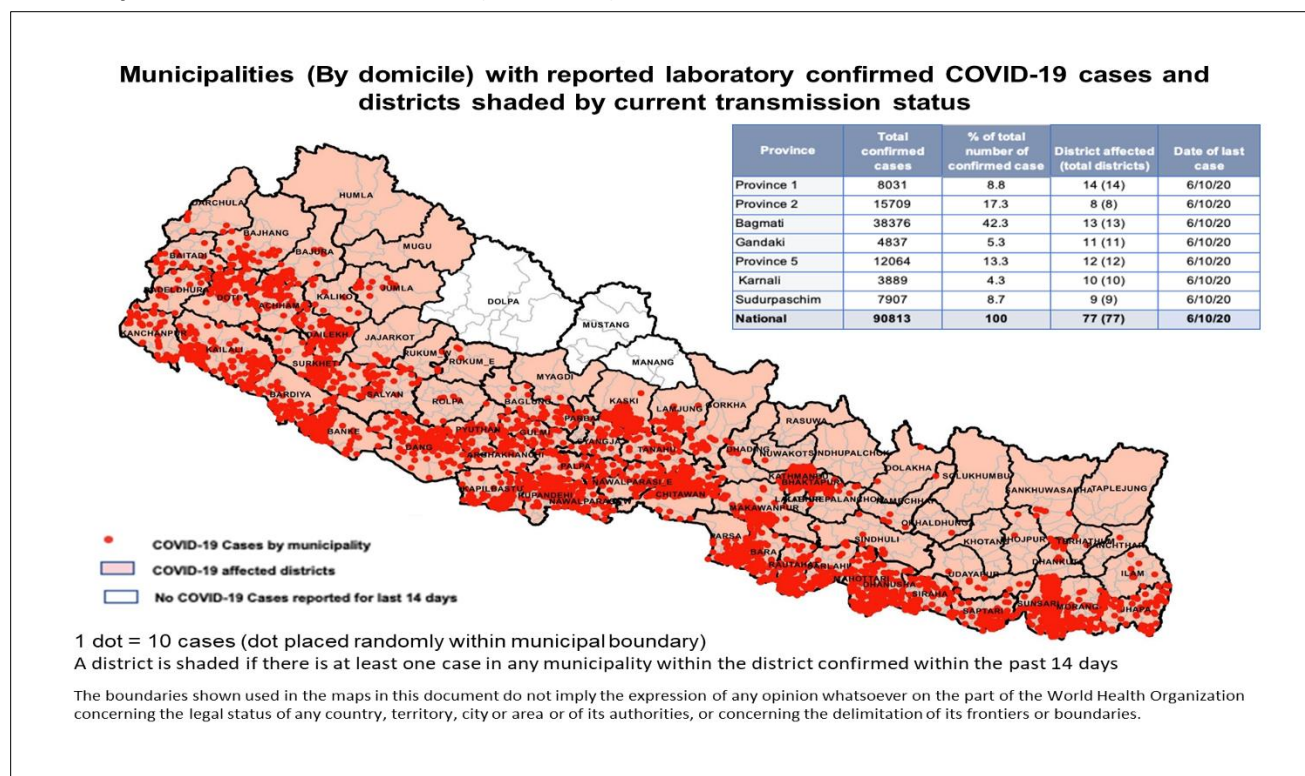
- Y-axis scale varies between Provinces.



**Figure 2C: Cumulative case count of laboratory-confirmed COVID-19 by province (N = 90813)** (Data updated on 07 October 2020 T07:00:00)



**Figure 3: Municipalities (By domicile) with reported laboratory-confirmed COVID-19 cases and districts shaded by current transmission status (N = 90813)** (Data updated on 07 October 2020 T07:00:00)



**Table 1: Summary of laboratory-confirmed COVID-19 cases, deaths and transmission by provinces.**

(N = 90813) (Data updated on 07 October 2020 T07:00:00)

Transmission classification based on [WHO definitions](#)

Reporting Province	Total confirmed cumulative cases	% of the total confirmed cumulative cases	Total cumulative deaths	Transmission classification*	Districts affected (total districts)	Date of most recent case <sup>#</sup>
Province 1	8031	8.8	66	Cluster of cases	14 (14)	6 October 2020
Province 2	15709	17.3	131	Cluster of cases	8 (8)	6 October 2020
Bagmati	38376	42.3	230	Cluster of cases	13 (13)	6 October 2020
Gandaki	4837	5.3	32	Sporadic cases	11 (11)	6 October 2020
Province 5	12064	13.3	83	Cluster of cases	12 (12)	6 October 2020
Karnali	3889	4.3	6	Cluster of cases	10 (10)	6 October 2020
Sudurpaschhim	7907	8.7	14	Cluster of cases	9 (9)	6 October 2020
<b>National Total</b>	<b>76257</b>	<b>100</b>	<b>562</b>	<b>Cluster of cases</b>	<b>77 (77)</b>	<b>6 October 2020</b>

<sup>#</sup> Date of the last case is the date of onset or date of sample collection or date of lab report based on information available.

\* Case classification is based on [WHO transmission classification](#)

**No cases** - provinces with no cases; **Sporadic cases**- provinces with one or more cases, imported or locally detected<sup>#</sup>

**Cluster of cases** - provinces experiencing cases, clustered in time, geographic location and by common exposures

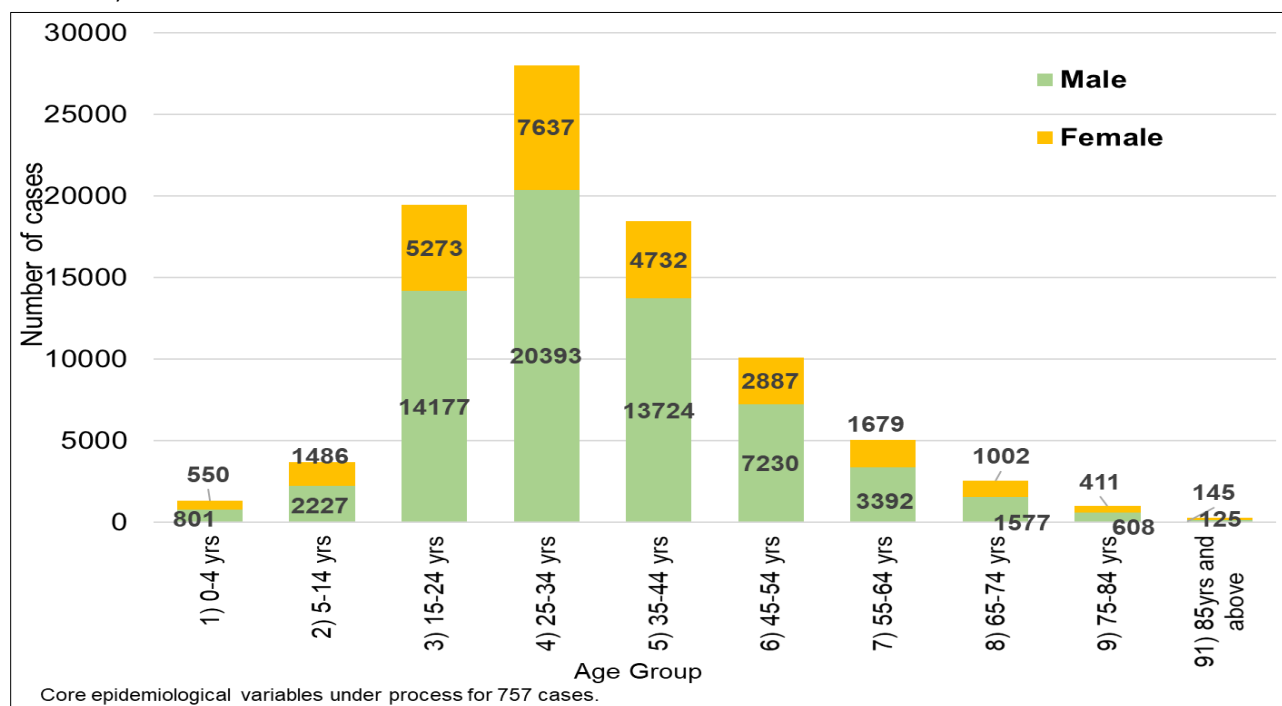
**Community transmission**- experiencing larger outbreaks of local transmission defined through an assessment of factors including, but not limited to: - Large numbers of cases not linkable to transmission chains

- Large numbers of cases from sentinel lab surveillance

- Multiple unrelated clusters in several areas of the country/territory/area

**Figure 4: Distribution of COVID-19 cases by age and sex (N = 90056)** (Data updated on 07 October 2020

T07:00:00)



**Table 2: Age Specific Case Fatality Ratio and Co-morbidity of Deaths\* in COVID-19 confirmed cases (N = 90813)** (Data updated on 07 October 2020 T07:00:00)

Age Group	Total confirmed cases	Death (male)	Death (female)	Deaths with any known comorbid condition	Age specific case fatality ratio (%)
0-4 yrs	1351	2	2	1	0.3
5-14 yrs	3713	2	1	3	0.08
15-24 yrs	19450	8	8	8	0.08
25-34 yrs	28030	23	13	20	0.13
35-44 yrs	18456	48	17	28	0.35
45-54 yrs	10117	59	25	57	0.83
55-64 yrs	5071	95	33	89	2.52
65-74 yrs	2579	87	36	101	4.77
75-84 yrs	1019	50	23	53	7.16
85+ yrs	270	20	10	22	11.11
Unknown	757	0	0	0	0
<b>National</b>	<b>90813</b>	<b>394</b>	<b>168</b>	<b>382</b>	<b>0.62</b>

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

COVID-19 positive lab result is temporally associated with death; causal association under investigation.

## PREPAREDNESS AND RESPONSE

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

- Case management
  - Effective case investigation, Tracing, Testing, Isolation and Treatment
  - ICU facilities, ventilators, Oxygen supply
  - Collaboration and coordination with local levels in Kathmandu valley
- Human resource mobilization
  - Hiring, training and mobilization of frontline health care providers
  - Management and mobilization of emergency medical deployment team
  - Mobilization of case investigation and contact tracing teams at local level
- Laboratory services – continued expansion and quality assurance
- Risk communication and community engagement enhancement
- Sero-surveillance study initiated
- Clinical trials ongoing
- Review of plan, guidelines & protocols based on the recent evidence and experience
- Guideline endorsed by MoHP this week
  - Standards for airlifting COVID-19 patients. Link [Here](#)
  - RT-PCR and antigen-based test for diagnostic purpose (Revised guidelines). Link [Here](#)



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

- WHO-Nepal consultants supported, designed, and facilitated the development of a National SARS-CoV-2 RT-PCR proficiency testing (PT) program at **National Public Health Laboratory, Teku, Nepal**. Panels with both positive and negative samples were sent to 20 designated COVID-19 testing laboratories in the first round and 30 laboratories in the second round through local courier agencies with support from WHO. The results for the proficiency test in the first round was satisfactory. In the second round, we received satisfactory results from 18 labs and 4 labs results are below 90% concordance.
- This week 12 laboratories participated in the National Quality Assurance Program (NQAS) through retesting strategy (5 positive and 5 negatives samples). All of them passed the quality control. WHO consultants have been providing technical support to NPHL in NQAS.
- Drafted and shared an amendment to NPHL for National Interim Guideline for SARS-CoV-2 PCR laboratories in National Public Health Laboratory Network, Nepal. Key recommendations provided were:
  - SARS-COV-2 PCR result interpretation: Results were reported as only positive and negative previously. Now, it has also been recommended that result may also be reported as 'intermediate'. This crucial recommendation is based on evidence, as some of the assays have been shown to produce false signals at high Cycle Threshold (CT) values.
  - Sample Collection: lower respiratory specimen in patients with a negative upper respiratory tract sample and in cases where there is strong clinical suspicion of COVID-19.
- Two laboratory Experts from **Global Outbreak Alert and Response Network (GOARN)** have been mobilized to Province 1 and 2 & Karnali and Sudurpaschim. The lab experts along with NPHL representatives will be visiting the Provincial Public Health Laboratories in these respective provinces for assessment, trouble shooting and training.
- WHO Nepal has provided technical assistance through WHO consultant in operationalizing the automated PERKIN Elmer nucleic acid extraction machine.
  - The NPHL staff were given training in calibration and troubleshooting for the operation of the automated RNA extraction machine.
  - With this support the facility is now functional at NPHL and has a direct impact on the laboratory surge capacity for COVID-19 testing.
  - WHO international consultant frequently reviewed the SARS-CoV-2 real time PCR results and audited the process including result interpretation as part of the continuous laboratory quality improvement activities. Audit results were shared with the NPHL staff and helped them to do root cause analysis to address the non-conformities.
- WHO Country office for Nepal supported in Organizing the weekly online technical training session for **COVID-19 laboratories** and facilitated a session on "Maintenance and Use of Pipettes". The two lab experts from GOARN shared their expertise on use of

pipettes through a comprehensive presentation. Participants from different laboratories discussed their challenges and the WHO consultant and NPHL resource person provided recommendations to address the challenges.

- Technical support in facilitating training for National Public Laboratory Staff (NPHL) on the following topics;
  - Hands on Training Antigen Detection Testing for SAR-COV-2 (HU Antigen Kit, Japan)
  - Standard Operating Procedures (SOPs) of Extraction and Master Mix (MM)
- WHO-Nepal has supported **Epidemiology and Disease Control Division (EDCD)** for the preparation and implementation of Surveillance Outbreak Response Management and Analysis System (SORMAS) for testing in Nepal
- Field investigators were trained in collaboration with EDCD and the contracted vendors, tested, equipped and prepared for field deployment for undertaking the national sero-surveillance study
- WHO supported **Curative Services Division (CSD)** with the installation of IT setup and video conferencing corner within CSD
- Country Office for Nepal is supporting **National Health Training Centre (NHTC)** and **Nursing Department of Health Services and Management Division** to establish a curriculum database for tracking IPC-Health Care Worker Management (HCWM) and Clinical trainings that have taken place and identify gaps in training in the COVID-19 context
- WHO continues to support **Teku hospital** with bespoke IPC support with both on the job assistance to the IPC focal person and with technical guidance documents
- Discussions to be supported by WHO regarding a pilot program, looking into the risk categorization of COVID-19 health care workers to be held with the EDCD, CSD and Nursing division
- As the number of ICU admissions due to COVID-19 are increasing, WHO is doing a deep dive into the supply and demand for ICU beds, oxygen availability, requirements and gaps to strengthen COVID-19 response
- WHO Media monitoring output shared every day with **MoHP spokesperson, HEOC officials**, as well as **EDPs and other partners**
- Active participation and sharing of the WHO global and national updates on risk communication and community engagement (RCCE) activities during bi-weekly **UNRCCE** meeting held on 6 Oct 2020
  - Generation of audio content products ongoing; Audio Sound Cloud has been created
- Finalization of the COVID-19 messages for video content production in line with Strategic communication plan to support MoHP for **political leaders** and **eminent social influencers**
- WHE team has established prefab offices within the UN House to accommodate the surge staff to work with adequate physical distancing

- All logistic support needed has been provided for training and field operations of the national sero-surveillance study
- All details for the establishment of the Information Management Unit of the HEOC has been worked out in consultation with WFP which is to be contracted for the purpose
- Costing details and other essential requirements for the establishment of temporary health desks at Points of Entry are being worked out with UNOPS

### **What are the health cluster partners doing?**

- Health cluster partners and its sub-clusters (Sexual & Reproductive Health and Mental Health) are robustly supporting for the continuation of COVID-19 response interventions and non-COVID-19 essential health services.
- Partners have continued their support for:
  - Continuation of COVID-19 response and essential health care services with special attention to -
    - Infection Prevention and Control (IPC) assessment & training
    - Risk communication and community engagement activities for compliance to public health standard and dissemination of IEC materials on COVID-19
    - Psychosocial support for the affected population
    - Capacitating the Case investigation and contact tracing at the field level including data management
  - Orientation and dissemination of the technical guidance endorsed by the Ministry of Health and Population to support the preparedness and response readiness at the field level
- Federal and Provincial level cluster coordination meeting are ongoing for coherent actions at all levels

### **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 regarding coronavirus disease 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](#).
- Global coronavirus disease situation dashboard can be found [here](#).
- Visit the WHO Nepal [Facebook page](#) and webpage on COVID-19 [here](#).

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