

COVID 19: Wave 2: One Nation, One Lockdown Framework

28 May 2021

Project: Jeevan Raksha is a initiative of Proxima which focuses on Advocacy, Analytics, and Awareness in the area of healthcare

Mission: Actively contribute towards **Right to Health** as constitutional right of Indian citizen

Project: Jeevan Raksha has been in the forefront of providing sharper analytical insights on emerging pattern of COVID 19 in India to the Central / State Government administrations, media, and general public. The contribution is appreciated by many state Governments.

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satyam-eva jayate, Truth alone triumphs, was adopted as the national motto of India on 26 January 1950

In COVID management, **Truthiness** in the disclosed data (data integrity) of Testing, Positivity, Recovery, and Fatality; or **truthfulness** of a individual about his/her (including family) health condition, is vital for India's efforts to save lives of the people.

It is Lives **AND** Livelihood; **NOT** Lives **OR** Livelihood: Both need to be Protected



- India has 1.37 bn people, 29 States & 7 Union Territories, 718 Districts, 5650 Taluks, 6614 Block Panchayata, 253163 Gram Panchayat, 22 Official Languages
 - US \$ 3 Trillion aspiring to become US \$ 10 Trillion economy in 100+ months from now
 - Livelihood of 80+% of the working population has to WORK-OUTSIDE-HOME and NOT WORK-FROM-HOME to feed their family members.
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- India's model will not work outside, also outside model will not work in India.
 - Solutions for Needs and Challenges have to come from the Experience, Introspection, and Observations.

"It is important to note that test positivity is a measure of testing capacity and while it can provide important context about case totals and trends, it is **NOT** a measure of how prevalent the virus is in communities. Policy decisions, like openings and closings or interstate travel, should not be determined based on test positivity alone" - Johns Hopkins Coronavirus Resource Center

<https://coronavirus.jhu.edu/testing/differences-in-positivity-rates>

TPR indicates the Testing Capacity of the State / District only

COVID is a Moving Invisible Beast, Needs Agile Processes and Systems to Contain and Control

- Even after 100% of the population is vaccinated, India may not be free from COVID until natural herd immunity is built. This may take anywhere between 9 – 18 months.
- Districts and Blocks have to be monitored and controlled 24X7 to ensure least possible impact of expected frequent resurgence of COVID waves in the near future
- A slightest negligence in containing the spread of virus may lead to Tsunami kind of surge which was witnessed few weeks back
- Lockdown has socio-economic implications on the people and becomes severe if it is loosely implemented at the grassroots level.

Moving Growth Rate (MGR), Oximeter to Measure COVID Containment Management

- Moving Growth Rate (MGR) is a %ge expression of growth of the value during the period as % of value at the beginning of the period.
 - Higher Moving Growth Rate (MGR) indicates shorter doubling period; or increase in daily average number of new cases. If Week-on-Week or Month-on-Month MGR moves upwards, this indicates the Containment Management in the said State/District has failed to contain the spread of virus. This will also indicate that the demand for Medical Infrastructure and resources is likely to increase in the coming days.
 - Lower Moving Growth Rate indicates longer doubling period; or decrease in daily average number. This is the sign of recovery.
 - MGR could also be used to reflect the velocity of virus spread in the region
- MGR helps the local administration to measure the efficacy of its Containment measures taken during the said period. If the new cases is surging in a particular state or a district it is a obvious indicator that the containment efforts are not yield the desired results.
- MGR is a simple and powerful tool to control and monitor micro-containment zones.

Target: 7-Day MGR: Less than 2% for 2 consecutive weeks before easing of lockdown /Restrictions

Target: 28-Day MGR: Less than 10% for 2 consecutive week before easing of lockdown/Restrictions

Trend indicator: Unsuitability of drop in average daily caseloads and also onset of early 3rd wave



- **Mega States: 256 Districts (excluding Mega Cities). Andhra Pradesh, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Maharashtra, Tamil Nadu, West Bengal** (Excluding Telangana due to non disclosure of District-level data in public domain).
 - 70% of COVID cases and Deaths are in these states.
 - 28-Day MGR of Positive Cases: 50% (28 Apr – 26 May)
 - 256 Districts (excluding Mega Cities) added 5 Mn new cases. On 28th April these districts had 1 Crore COVID cases, it increase to 1.50 Crores
 - Deccan Surge:
 - Tamil Nadu: 7-Day MGR in 14 Districts is over 20%.
 - Karnataka: 21 of 29 Districts (excluding Bengaluru Urban) 7-Day MGR is over 10%.
 - Kerala: 28-Day MGR is 62%. Added 9.3 Lacs new cases.
 - West Bengal: Total COVID cases increased from 6 lacs to 10.3 lacs (Excluding Kolkata).
- **EAG States: 294 Districts Bihar, Chattisgarh, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttarakhand, and Uttar Pradesh** (Assam is excluded due to non-disclosure of district level data in public domain)
 - Odhisha, 23 out of 30 Districts have witnessed over 10% 7-Day MGR. Districts such as Boudh, Dhenkanal, Angul are having 7-Day MGR of over 25%, a matter of serious concern.
 - In Uttar Pradesh few Districts administrations have achieved miraculous transformation in COVID situation
 - Ballia Districts and Kanpur Dehat Districts, added 5705 and 1557 new cases during the 3 weeks period (28 April – 19 May). However, during the week (20-26 May), the both Districts added only 93 and 22 new cases respectively.
- **North-Eastern States: Arunachal Pradesh, Meghalaya, Mizoram, Nagaland, and Tripura** (Sikkim and Manipur are excluded due to non-disclosure of District level data in Public Domain)
 - 28-Day MGR of Positive Cases 55%, increased from 88,000 to 137,000
 - Arunachal Pradesh, Meghalaya, and Nagaland

MGR based Lockdown or Relaxation of Restriction Framework

- **100% Lifting of Lockdown:** Any District having 7-Day MGR of Positive Cases Less than 2% for 2 Consecutive Weeks will have an option of 100% Lifting of the lockdown in the district with appropriate control measures.
- **Partial Lockdown:** Any District having 7-Day MGR of Positive Cases in the range of 2 and 9% for 2 Consecutive Weeks will have an option of Lifting of the district with appropriate control measures
- **Full Lockdown:** In any District if 7-Day MGR of Positive Cases is above 10% for 2 Consecutive Weeks full lockdown will be imposed (in the lines of 21-Day Lockdown announced in May 2020) for atleast 2 full weeks during which MGR should reduce below 10%.

Recommended Imposition of Restriction based on Positive Cases 7-Day MGR

Week Period: 12 – 19 May & 20 – 26 May



100% Unlocking (7-Day MGR Less than 2% for 2 consecutive Weeks)		Partial Lockdown (7-Day MGR 2 - 9% for 2 consecutive Weeks)		Full Lockdown (7-Day MGR Above 10% for 2 consecutive Weeks)	
State / UT	Districts / UT	State / UT	Districts / UT	State / UT	Districts / UT
Andaman and Nicobar Islands	Andaman and Nicobar Islands	Andaman and Nicobar Islands	NIL	Andaman and Nicobar Islands	NIL
Andhra Pradesh	NIL	Andhra Pradesh	Anantapur, West Godavari, Prakasam, Srikakulam, Vizianagaram, Kurnool, Krishna, Y.S.R. Kadapa, S.P.S. Nellore, Guntur	Andhra Pradesh	East Godavari, Visakhapatnam, Chittoor
Arunachal Pradesh	Siang	Arunachal Pradesh	West Kameng, Anjaw, East Siang, Papum Pare, Pakke Kessang, Shi Yomi, Lepa Rada, Longding, Lower Siang, Tirap, West Siang	Arunachal Pradesh	Kamle, Tawang, Upper Dibang Valley, Changlang, Namsai, Lower Subansiri, Kurung Kumey, Upper Siang, Upper Subansiri, Kra Daadi, Lower Dibang Valley, Lohit, East Kameng

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State / UT	Districts / UT	State	Districts	State	Districts
Bihar	NIL	Bihar	Kishanganj, Araria, Gopalganj, Supaul, Katihar, Begusarai, Muzaffarpur, Sitamarhi, Siwan, Banka, Purnia, Madhepura, Munger, East Champaran, Vaishali, Nalanda, Madhubani, Khagaria, Saharsa, Patna, West Champaran, Lakhisarai, Gaya, Arwal, Aurangabad, Buxar, Bhojpur, Bhagalpur, Nawada, Saran, Jamui, Kaimur, Rohtas, Sheikhpura, Jehanabad,	Bihar	Darbhanga, Sheohar
Chandigarh	NIL	Chandigarh	Chandigarh	Chandigarh	NIL

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State / UT	Districts / UT	State	Districts	State	Districts
Dadra and Nagar Haveli	NIL	Dadra and Nagar Haveli	Dadra and Nagar Haveli	Dadra and Nagar Haveli	NIL
Daman	NIL	Daman	Daman	Daman	NIL
Diu	NIL	Diu	Diu	Diu	NIL
Goa	NIL	Goa	Goa	Goa	NIL
Gujarat	NIL	Gujarat	Anand, Sabarkantha, Panchmahal, Dang, Junagadh, Kheda, Valsad, Kutch, Bharuch, Vadodara, Banaskantha, Navsari, Amreli, Mahisagar, Narmada, Aravalli, Bhavnagar, Patan, Gir Somnath, Chhota Udaipur, Dahod, Rajkot, Jamnagar, Gandhinagar, Mehsana, Surendranagar, Tapi, Surat, Botad, Morbi,	Gujarat	Porbandar, Devbhumi Dwarka

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State / UT	Districts / UT	State / UT	Districts / UT	State / UT	Districts / UT
Haryana	NIL	Haryana	Sirsa, Fatehabad, Nuh, Yamunanagar, Rohtak, Hisar, Jind, Kaithal, Mahendragarh, Panchkula, Karnal, Sonipat, Ambala, Kurukshetra, Panipat, Gurgaon, Faridabad	Haryana	Jhajjar, Bhiwani, Rewari, Charkhi Dadri, Palwal
Himachal Pradesh	NIL	Himachal Pradesh	Una, Bilaspur, Hamirpur, Sirmaur, Mandi, Shimla, Solan, Kullu, Lahaul and Spiti	Himachal Pradesh	Kinnaur, Kangra, Chamba
Jammu & Kashmir	NIL	Jammu & Kashmir	Doda, Baramulla, Punch, Shopiyan, Udhampur, Reasi, Jammu, Kishtwar, Srinagar	Jammu & Kashmir	Ramban, Kulgam, Kupwara, Ganderbal, Budgam, Anantnag, Bandipora, Samba, Kathua, Pulwama, Rajouri
Jharkhand	Pakur	Jharkhand	Simdega, Lohardaga, Gumla, Garhwa, Giridih, Dhanbad, Latehar, Palamu, Deoghar, Chatra, West Singhbhum, Bokaro, Hazaribagh, Khunti, Koderma, Saraikela-Kharsawan, East Singhbhum, Ramgarh, Jamtara, Sahibganj, Godda, Ranchi, Dumka	Jharkhand	NIL

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State / UT	Districts / UT	State / UT	Districts / UT	State / UT	Districts / UT
Karnataka	NIL	Karnataka	Bengaluru Rural, Dakshina Kannada, Yadgir, Mandya, Vijayapura, Bagalkote, Kalaburagi,	Karnataka	Uttara Kannada, Chitradurga, Chikkamagaluru, Gadag, Mysuru, Hassan, Belagavi, Chamarajnar, Dharwad, Davanagere, Kolar, Haveri, Tumakuru, Shivamogga, Udupi, Ramanagara, Chikkaballapura, Koppal, Raichur, Kodagu, Ballari,
Kerala	NIL	Kerala	Ernakulam, Thrissur, Kannur, Kasaragod, Kottayam, Pathanamthitta, Wayanad, Kozhikode	Kerala	Palakkad, Malappuram, Kollam, Thiruvananthapuram, Idukki, Alappuzha
Ladakh	NIL	Ladakh	Leh, Kargil	Ladakh	NIL
Lakshadweep	NIL	Lakshadweep	NIL	Lakshadweep	Lakshadweep

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State / UT	Districts / UT	State / UT	Districts / UT	State / UT	Districts / UT
Madhya Pradesh	Alirajpur, Barwani, Jhabua, Khandwa	Madhya Pradesh	Anuppur, Damoh, Umaria, Sagar, Ratlam, Rewa, Dindori, Rajgarh, Agar Malwa, Sidhi, Indore, Shivpuri, Ujjain, Mandsaur, Shahdol, Balaghat, Dewas, Bhopal, Sehore, Panna, Raisen, Singrauli, Shajapur, Ashoknagar, Betul, Sheopur, Seoni, Hoshangabad, Dhar, Jabalpur, Khargone, Bhind, Vidisha, Satna, Datia, Guna, Chhatarpur, Morena, Neemuch, Katni, Mandla, Chhindwara, Burhanpur, Harda, Niwari, Gwalior, Tikamgarh, Narsinghpur	Madhya Pradesh	NIL
Maharashtra	Bhandara, Nagpur, Thane, Nandurbar, Nanded	Maharashtra	Sangli, Osmanabad, Amravati, Beed, Akola, Yavatmal, Washim, Solapur, Ahmednagar, Parbhani, Hingoli, Gadchiroli, Jalna, Wardha, Raigad, Palghar, Chandrapur, Dhule, Aurangabad, Latur, Nashik, Pune, Jalgaon, Gondia	Maharashtra	Sindhudurg, Ratnagiri, Kolhapur, Buldhana, Satara

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State / UT	Districts / UT	State / UT	Districts / UT	State / UT	Districts / UT
Meghalaya	NIL	Meghalaya	NIL	Meghalaya	South West Khasi Hills, North Garo Hills, South West Garo Hills, Ribhoi, South Garo Hills, West Jaintia Hills, East Garo Hills, East Khasi Hills, East Jaintia Hills, West Khasi Hills, West Garo Hills,
Mizoram	NIL	Mizoram	Lunglei, Mamit, Hnahthial	Mizoram	Lawngtlai, Aizawl, Saiha, Champhai, Saitual, Serchhip, Khawzawl, Kolasib
Nagaland	NIL	Nagaland	Dimapur, Mon. Peren	Nagaland	Phek, Wokha, Zunheboto, Kiphire, Mokokchung, Tuensang, Longleng, Kohima
Odisha	NIL	Odisha	Kandhamal, Kendujhar, Balangir, Jharsuguda, Gajapati, Ganjam, Nuapada	Odisha	Boudh, Dhenkanal, Angul, Deogarh, Nayagarh, Mayurbhanj, Balasore, Jagatsinghpur, Jajpur, Nabarangapur, Subarnapur, Bhadrak, Cuttack, Koraput, Kendrapara, Kalahandi, Puri, Rayagada, State Pool, Khordha, Sambalpur, Bargarh, Malkangiri
		Puducherry	Yanam, Mahe	Puducherry	Karaikal, Puducherry

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State / UT	Districts / UT	State / UT	Districts / UT	State / UT	Districts / UT
Punjab	NIL	Punjab	Fatehgarh Sahib, Ferozepur, Pathankot, Barnala, Bathinda, Sangrur, Faridkot, Gurdaspur, Hoshiarpur, Tarn Taran (Khadoor Sahib), Moga, Amritsar, Jalandhar, Ludhiana, Kapurthala, Patiala, Rupnagar, S.A.S. Nagar, Shahid Bhagat Singh Nagar	Punjab	Sri Muktsar Sahib, Fazilka, Mansa
Rajasthan	Jalore	Rajasthan	Jhunjhunu, Ganganagar, Barmer, Pratapgarh, Sikar, Churu, Jaipur, Karauli, Pali, Alwar, Banswara, Bharatpur, Udaipur, Tonk, Dungarpur, Bundi, Jhalawar, Nagaur, Chittorgarh, Dausa, Bikaner, Rajsamand, Baran, Kota, Sirohi, Jodhpur, Sawai Madhopur, Ajmer, Bhilwara, Dholpur,	Rajasthan	Jaisalmer, Hanumangarh
Tamil Nadu	NIL	Tamil Nadu	Vellore	Tamil Nadu	Perambalur, Erode, Tiruppur, Virudhunagar, Kanyakumari, Tiruchirappalli, Thiruvavur, Tirupathur, Ariyalur, Krishnagiri, Nagapattinam, Coimbatore, Nilgiris, Namakkal, Madurai, Tiruvannamalai, Dharmapuri, Thanjavur, Karur, Ramanathapuram, Tenkasi, Pudukkottai, Kallakurichi, Dindigul, Theni, Thoothukkudi, Viluppuram, Ranipet, Sivaganga, Cuddalore. Kancheepuram. Thiruvallur, Chengalpattu, Salem, Tirunelveli

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State / UT	Districts / UT	State / UT	Districts / UT	State / UT	Districts / UT
Tripura	NIL	Tripura	North Tripura, Gomati, Dhalai	Tripura	Sipahijala, West Tripura, South Tripura, Unokoti, Khowai
Uttar Pradesh	Mahoba, Lalitpur, Chandauli, Hamirpur, Lucknow, Prayagraj, Kanpur Dehat, Fatehpur, Kaushambi	Uttar Pradesh	Baghpat, Amroha, Amethi, Ghazipur, Sonbhadra, Basti, Sant Kabir Nagar, Bahraich, Maharajganj, Barabanki, Mau, Shrawasti, Sitapur, Ayodhya, Gautam Buddha Nagar, Bulandshahr, Shamli, Ambedkar Nagar, Chitrakoot, Jalaun, Banda, Ballia Saharanpur, Gorakhpur, Deoria, Ghaziabad, Jaunpur, Muzaffarnagar, Hapur, Balrampur, Kushinagar, Siddharthnagar, Bhadohi, Meerut, Bijnor, Farrukhabad, Hathras, Pilibhit, Firozabad, Hardoi, Lakhimpur Kheri, Budaun, Shahjahanpur, Sambhal, Rampur, Rae Bareilly, Pratapgarh, Varanasi, Etawah, Unnao, Gonda, Sultanpur, Kasganj, Auraiya, Mainpuri, Jhansi, Etah, Aligarh, Moradabad, Bareilly, Azamgarh, Mathura, Agra, Mirzapur, Kannauj	Uttar Pradesh	NIL
Uttarakhand	NIL	Uttarakhand	Pauri Garhwal, Champawat, Nainital, Haridwar Uttarkashi, Dehradun	Uttarakhand	Bageshwar, Rudrapur, Chamoli, Pithoragarh, Almora, Tehri Garhwal, Udham Singh Nagar
West Bengal	NIL	West Bengal	Dakshin Dinajpur, Birbhum, Murshidabad, Malda, Purulia	West Bengal	Bankura, Jalpaiguri, Nadia, Kalimpong, Purba Medinipur, Darjeeling, Paschim Medinipur, Hooghly, Purba Bardhaman, Howrah, South 24 Parganas, Alipurduar, North 24 Parganas, Paschim Bardhaman, Cooch Behar, Uttar Dinajpur,

Data source and disclaimer

- The data collated and analysed based on secondary data. The primary sources are:
<https://www.mohfw.gov.in/> <https://www.covid19india.org/> www.google.com; www.wikipedia.org;
<https://www.worldometers.info/coronavirus/#countries> / <https://coronavirus.jhu.edu/>
- The user of this presentation is advised to revalidate the shared data from authorised public institutions.

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Thank you