

Proxima – PHFI Pandemic and Epidemic Management System

**COVID 19: Zonewise Analysis
&
Statewise Performance Scorecard**
Lockdown 1.0 to Unlock 2.0



Contents

- July Trend Analysis of 4 Nations with highest number of COVID cases
- India's performance in comparison with the nations having over 100K COVID Cases
- Key observations and learnings – Qatar and Spain
- Case Study: Analysis of Deceased Profile in Karnataka
- Growth Pattern: Death Per Million Population in India
- Key reasons for surge in mortality in India
- Zonewise projected number of COVID cases and mortality in August
- Mega Cities: Analysis of Monthly Moving Average Growth Rate: July
- Statewise Performance Scorecard: Lockdown (1.0 – 4.0) to Unlock (1.0 – 2.0)

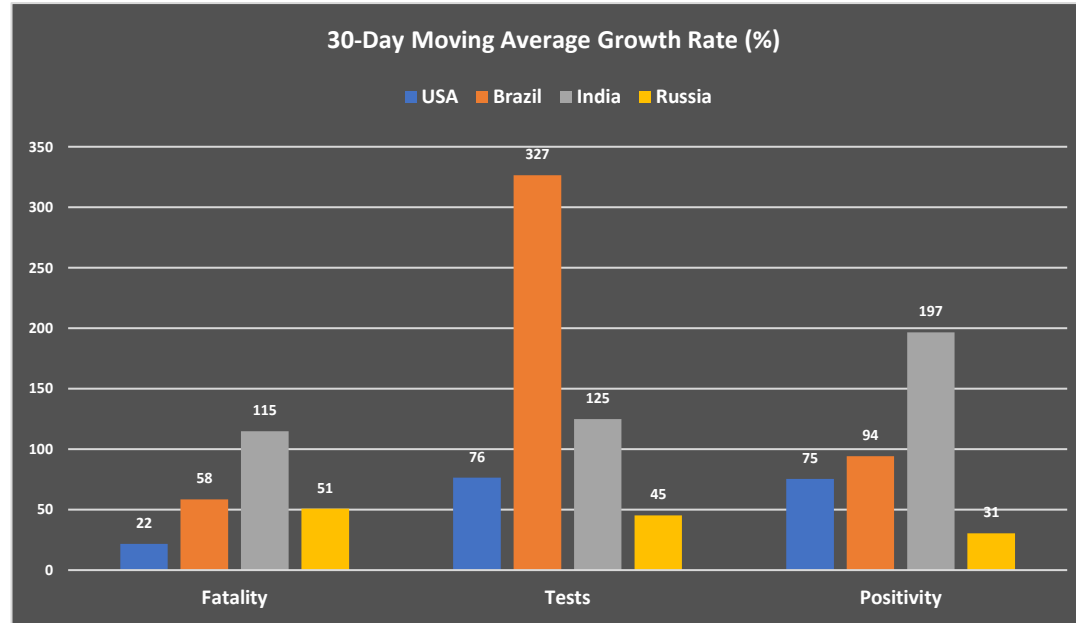


satyam-eva jayate, **Truth alone triumphs**, was adopted as the national motto of India on 26 January 1950

In COVID management, **Truthiness** in the disclosed data (data integrity) of 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.

Analysis of most affected nations

Deaths as on 31 Aug	
USA	156771
Brazil	92568
India	36551
Russia	13963



India's population is 2X of combined population of Brazil, Russia, and USA

- India has managed its resources most efficiently when compared with other 3 nations.
 - According UNDP report - India has 8 Physicians / 10000 Population and 7 Hospital Beds / 10,000 Population. Whereas USA has 26 Physicians and 29 Hospitalised Beds; Russia has 40 Physicians and 82 Hospitalised Beds; and Brazil has 21 Physicians and 22 Beds. and also with limited number of Physicians and Hospital beds. India is ranked 129th by UNDP on these parameters. Whereas USA is ranked 26th, Russia 49th, and Brazil 79th.
- Recovery Rate: Russia has the highest recovery rate of 76%, followed by Brazil 71%, India 64%, and USA has the least recovery rate of 49%.
- Case Fatality Rate: Russia 1.67%, India 2.04%, USA 3.22%, and Brazil 3.36%
- Deaths Per Million Population: India 31, Russia 101, Brazil 469, and USA 495

Indicated Data: as on 31 Jul

Latest trend indicates India is witnessing relatively higher growth rate of COVID Cases, due to increased testing

India's performance in comparison with Club of Nations having over 100K COVID Cases

UNDP Ranking: Quality of Health				COVID Impact Status as on 31 July 2020 (2000 hrs)												
Ranking	Country	Physicians / 10000 Pn	Hospital Beds / 10000 Pn	Population	Tests	Cases	Recovery	Deceased	Closed Cases	Tests / Mn Pop	Cases / Mn Pop	Death / Mn Pop	Test Positivity Rate (TPR) %	Mortality Rate (MR %)	Recovery Rate (%)	Closed Case Fatality Rate (%)
15	USA	26	29	330854064	585,93,248	47,06,059	23,27,572	1,56,752	24,84,324	1,77,097	14,224	474	8.03	3.33	49	6.3
79	Brazil	21	22	212442762	130,96,132	26,66,298	18,84,051	92,568	19,76,619	61,645	12,551	436	20.36	3.47	71	4.7
129	India	8	7	1378937377	193,58,659	17,01,307	10,95,647	36,551	11,32,198	14039	1234	27	8.79	2.15	64	3.2
49	Russia	40	82	145929848	284,00,000	8,45,443	6,38,410	14,058	6,52,468	1,94,614	5,793	96	2.98	1.66	76	2.2
82	Peru	13	16	32934728	23,48,396	4,14,735	2,87,127	19,217	3,06,344	71,305	12,593	583	17.66	4.63	69	6.3
42	Chile	11	22	19103405	16,23,992	3,55,667	3,28,327	9,457	3,37,784	85,011	18,618	495	21.90	2.66	92	2.8
25	Spain	41	30	46753443	66,78,414	3,35,602		28,445	28,445	1,42,843	7,178	608	5.03	8.48	0	NA
65	Iran	11	15	83906701	24,56,909	3,04,204	2,63,519	16,766	2,80,285	29,281	3,626	200	12.38	5.51	87	6.0
15	UK	28	28	67858826	160,19,907	3,03,181		46,119	46,119	2,36,077	4,468	680	1.89	15.21	NA	NA
152	Pakistan	10	6	220673722	19,73,237	2,78,305	2,47,177	5,951	2,53,128	8,942	1,261	27	14.10	2.14	89	2.4
36	Saudi Arabia	24	27	34787354	33,50,541	2,75,905	2,35,658	2,866	2,38,524	96,315	7,931	82	8.23	1.04	85	1.2
29	Italy	41	34	60468295	68,20,613	2,47,537	1,99,974	35,141	2,35,115	1,12,797	4,094	581	3.63	14.20	81	14.9
135	Bangladesh	14	5	164645344	11,76,809	2,37,661	1,35,136	3,111	1,38,247	7,148	1,443	19	20.20	1.31	57	2.3
59	Turkey	18	27	84267248	48,00,823	2,30,873	2,14,535	5,691	2,20,226	56,971	2,740	68	4.81	2.46	93	2.6
4	Germany	42	83	83763806	80,06,135	2,10,665	1,93,600	9,224	2,02,824	95,580	2,515	110	2.63	4.38	92	4.5
26	France	32	65	65262729	29,82,302	1,87,919	81,500	30,265	1,11,765	45,697	2,879	464	6.30	16.11	43	27.1
13	Canada	26	27	37733476	40,50,358	1,16,312	1,01,227	8,935	1,10,162	1,07,341	3,082	237	2.87	7.68	87	8.1
41	Qatar	NA	12	2807805	4,95,377	1,10,695	1,07,377	174	1,07,551	1,76,429	39,424	62	22.35	0.16	97	0.2
111	Indonesia	4	12	273760978	15,06,191	1,08,376	65,907	5,131	71,038	5,502	396	19	7.20	4.73	61	7.2
Total				3346891911	183738043	13636744	8406744	526422	8933166	54898	4074	157	7.42	3.86	62	5.9
India's share (%)				41	11	12	13	7	13	54898	4074	157	7.42	3.86	62	5.9
Average of Nations having over 100K COVID Cases																

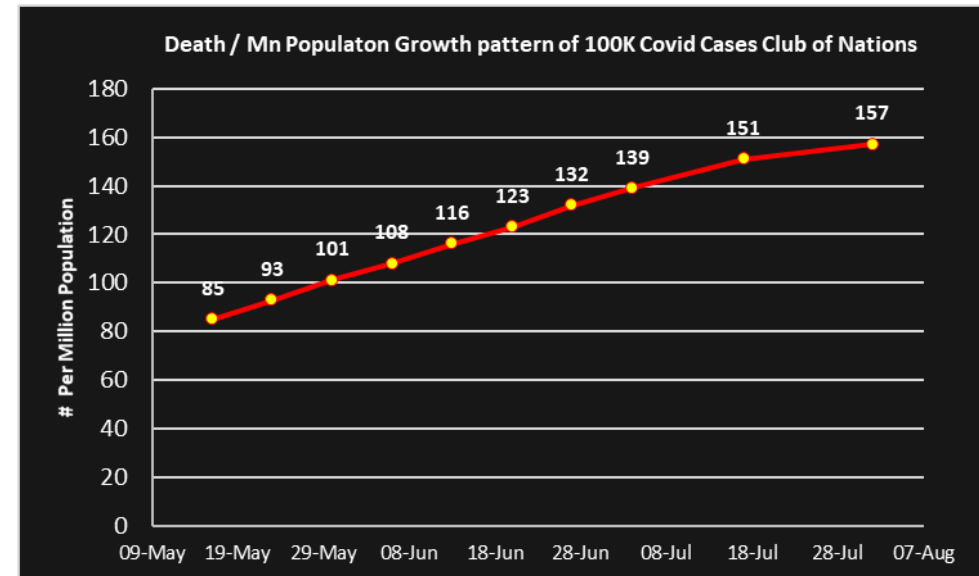
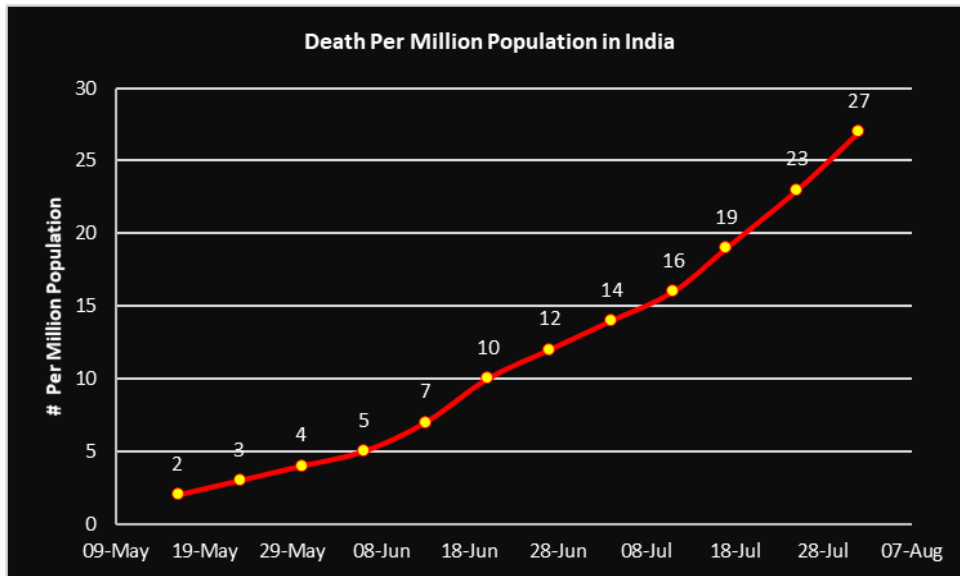
India's Ranking in terms of Key Performance Parameters:

1. High Recover Rate : 13th
2. Least Test Positivity Rate: 12th
3. Least Mortality Rate: 6th
4. Testing Per Million Population*: 16th (above 3 Asian nations - Pakistan, Bangladesh, and Indonesia)
5. Least Cases Per Million Population*: 2nd
6. Least Deaths Per Million Population*: 3rd (Succeeded by Indonesia and Bangladesh, and followed by Pakistan)

* India's population is equal to 40% of sum total population of all the nations having over 100K COVID cases

Death Per Million Population: Growth Pattern

India's current and future DPM scenario									
Factors directly influencing India's future DPM			India's Current DPM Status			Pattern among nations having more than 100K COVID cases			
a. Qualitative and quantitative testing and use of reliable kits			Dates	Deaths	DPM	a. Average DPM is 157. India's current DPM is 30			
b. Quarantine and home isolation management			07-Jul	20178	15.0	b. Highest DPM of a nation is 680 and least is 19			
c. Focusing on emerging red zones in smaller towns			18-Jul	26828	19.5	c. Tests / Mn Population is 54898. India is 14039			
d. Continued surveillance in areas surge has reduced			07-Jul	41638	30.0	d. Cases / Mn Population is 4074. India is 1234			
Various scenario indicated in June 2020									
Population 1379418901	Optimistic		Pragmatic			Pessimistic		Catastrophic	
	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6	Scenario 7	Scenario 8	Scenario 9
DPM	10	20	30	50	75	100	150	250	400
Deaths	13800	27700	41500	69200	104000	138500	207600	345000	550000
Reached Date	22nd June	19th July	06th Aug						



One of the key factors for increase in Mortality in India is due to slow and poor quality of testing; and also delayed critical care for home isolated positive patients

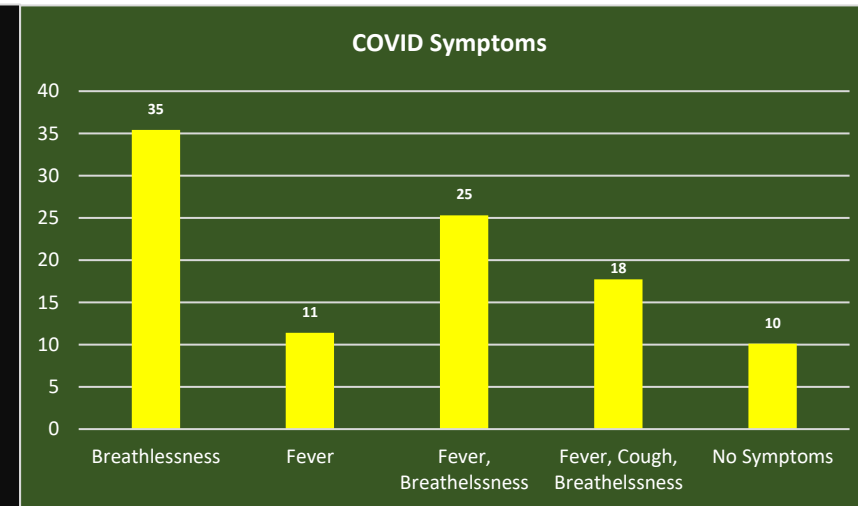
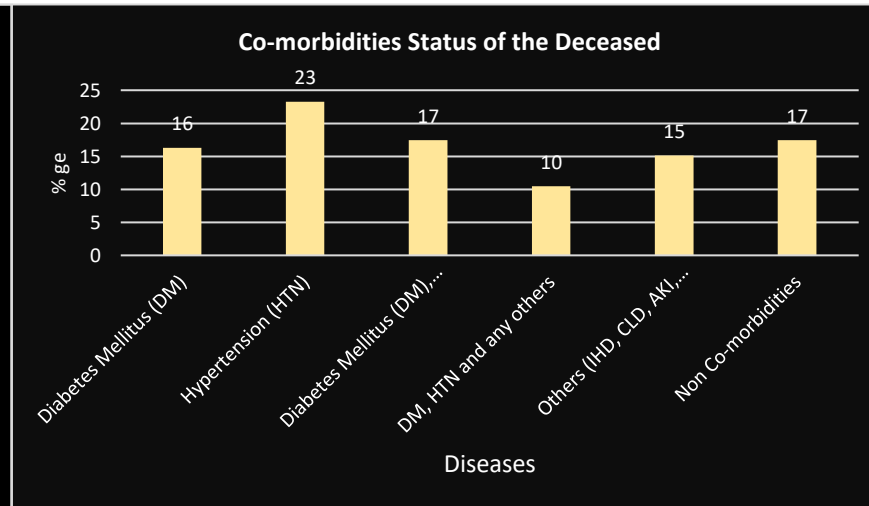
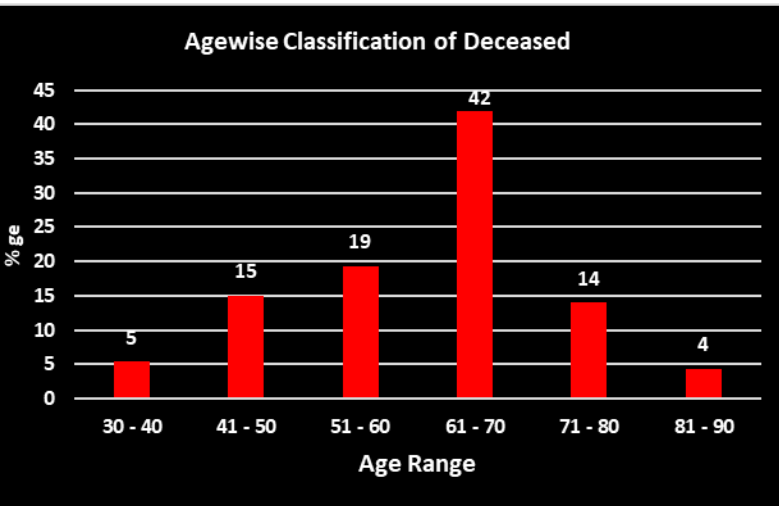
COVID 19: Analysis of Deceased Profile in Karnataka

Government of Karnataka has set a benchmark for COVID related data disclosure to general public. The state releases daily media bulletin by disclosing districtwise as well as patientwise latest updates on all key parameters.

Based on the Media bulletin dated 6th August 2020, analysis was carried out to examine the profile of the deceased on bulletin issue date. The following key observations will be useful for other states to factor in their strategy formulation to manage the increased surge in positivity and mortality:

- **Gender:** 66% were male and 27% female.
- **Age:** 61% of the deceased were in the age group of 51 – 70 years. 20% were between 30 - 50 years
- **Co-morbidities*:** 44% were Diabetic of which 28% also had Hypertension and other co-morbidities. 23% had Hypertension.
- **Symptoms:** 68% of them had SARI symptoms, 10% ILI. Only 10% were Asymptomatic.
- **Death on the same day of Hospitalisation:** In Bengaluru Urban, out of 15 deceased, 11 of them (73%) died on the same day of hospitalisation.

* Other Co-morbidities include - IHD, CLD, AKI, COPD



Qatar: Balancing Lives and Livelihood: High Performance

In Pandemic Performance review, the most ideal measure is against least possible mortality

Qatar has over 100K COVID Cases. It reached 10K COVID Cases on 26th April (India reached 10K on 12th April).

Hospital Beds / 10,000 People: Qatar 10. India 7

Tangible Results:

- Recovery Rate: 97%: Highest among the Club of nations having over 100K COVID Cases
- Mortality: 0.16%: Least among the Club of nations having over 100K COVID Cases
- Testing: 1,76,429 / Mn Population. 4th highest nation after UK, USA, and Russia.

Intangible Results:

- Continuity of medical services at all times for Non-COVID patients during the entire pandemic period
- Strategic lockdown and other measures to ensure least possible impact on the economic activities of the country

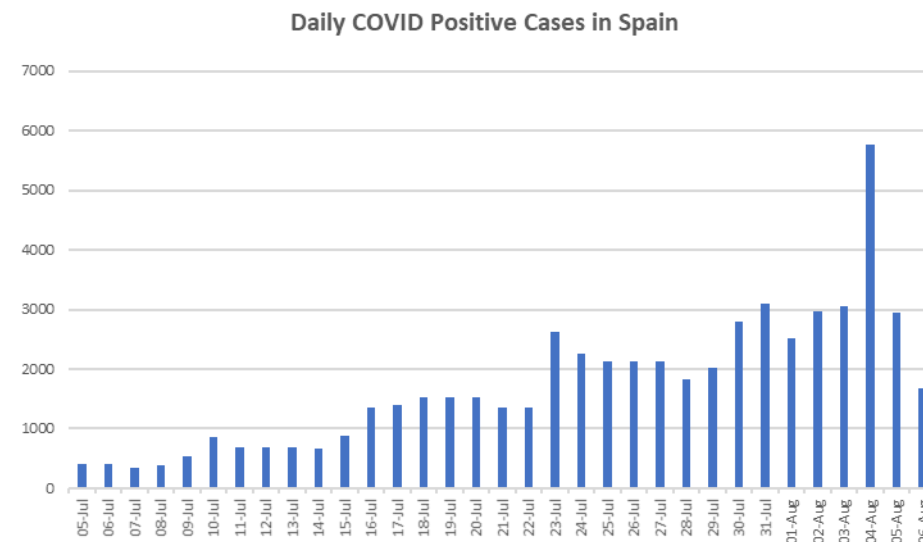
Qatar: Key Observations and Learning

Key areas	Learning
Safety and Comfort of the people	Safety and comfort of common man alone is kept at the centre of the strategy formulation.
Continuity	Enable society to continue to function as normal as possible during the pandemic. For instance, medical services for Non-covid healthcare seeker was made available as usual.
Authority and Accountability	Supreme Committee for Crisis Management with complete and clear authority and accountability
Enforcement	Integrated Approach for Managing: Surveillance, Testing, Containment, and Clinical. Action against violations are strictly and swiftly implemented.
Healthcare Products and Services	Regularly assess the surge and accordingly manage the resources to ensure worldclass healthcare products and services are readily available with clear guidelines and policies, particularly related to pricing. Ensuring the needs of medical staff are taken care and also kept them motivated.
Multi-function and multi-disciplinary participation	Managing Pandemic requires different skills and competences. Therefore, the apex team had active participation council of ministers. The health sector had multi-institutional committees.

Spain: Key observations

Spain Case Study		
30-Day Moving Avg Growth Rate (%)		
Month	Positivity	Mortality
April	8987.5	6298.6
May	51.9	44.6
June	6.1	4.1
July	4.6	0.4

Mortality Occurance Period	
April & May	96%
June & July	4%



- **Positivity:** On 15th April, the number of COVID cases increased to 1.8 Lacs, in May to 2.75 lacs, June 2.9 lacs, and 15th July 3.04 lacs. During June and July, the incremental increase in COVID cases was only 14K.
- **Mortality:** Consistently decline in incremental growth in absolute numbers. In April it was 18518, May: 8382, June: 1105, and July 114.
- In spite of Spain testing 1.5 lacs people for every million population, unfortunately the Death Per Million population is at 610

There are signs of second surge in COVID in Spain. The message is strong and clear for all Mega cities in India to be vigilant

Even though Spain experienced worst impact of COVID during April and May, its strategy and action resulted in flattening the

Testing Analysis

- @ 15K Testing / Mn population, India is currently testing 1/3 of the average testing per million population of nations having over 100K COVID cases
- The recent surge in positivity and mortality in semi-urban and rural areas clearly indicates that adequate and timely testing has not been carried out in all most all the districts in India.
- During Lockdown 1.0 – 4.0 (April and May) India could carryout only 40 lacs COVID tests, around 17% of the total 2.3 Mn tests conducted till 31 Aug. There is a need to examine by concerned Government agencies to find out whether the delay and inadequate testing are the key factors contributing towards high mortality in recent weeks.

In India, COVID Mortality Rate is inversely proportional to Testing Rate

% Share during Lockdown and Unlock Phases			
Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	12.7	17	9.4
Unlock: 1.0 - 2.0	87.3	87	90.6

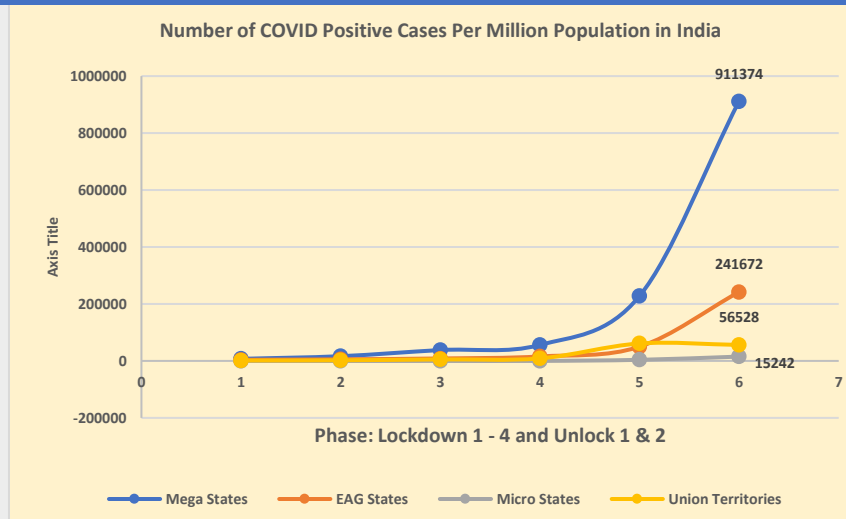
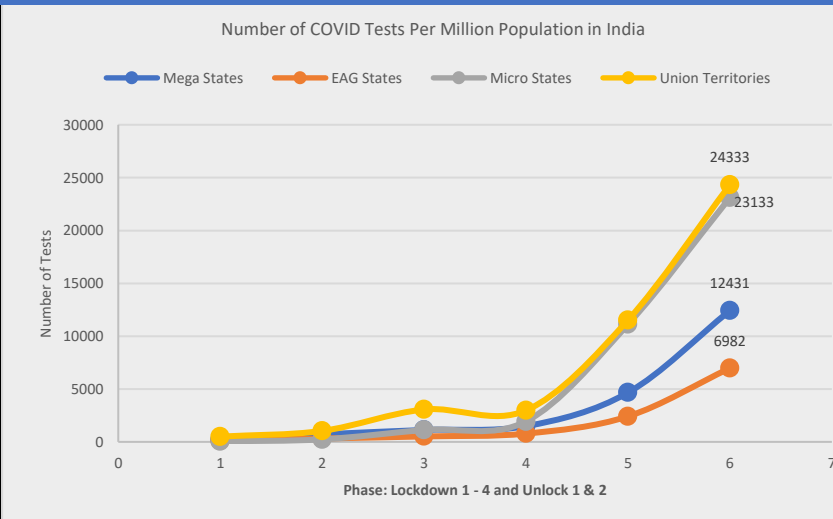
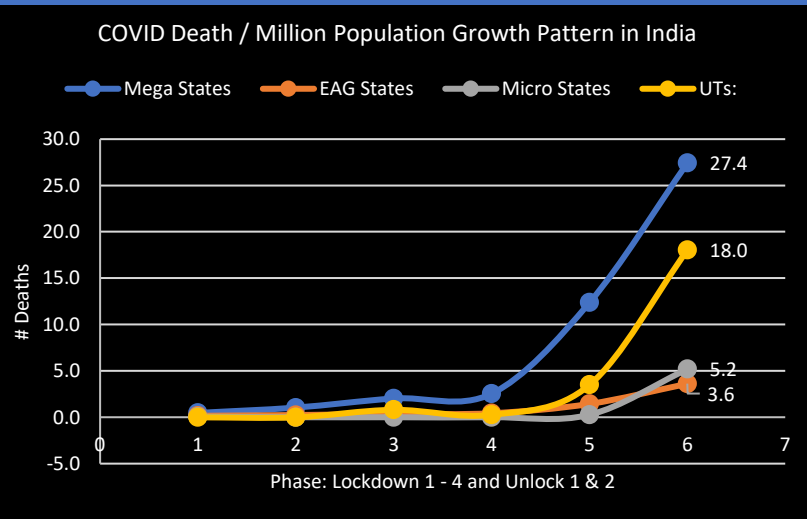
Surge in mortality is leading to qualitatively lower, but quantitatively higher testing



Emerging Pattern

1. Increase in testing is directly proportionate to the positivity.
2. Quantitative and qualitative testing is key to reduce the Death Per Million population. Qatar is the example.
3. Delay in testing when Test Positivity Rate (TPR) and Positivity / Mn Population is high, leads to surge in higher Deaths / Mn Population. Currently India's situation.

The graph clearly indicates that, the increased number of deaths in June & July, compelled all states to ramp-up testing numbers during the same period



Surge in Mortality in Mega States during Unlock 1.0 & 2.0 is due to poor qualitative and quantitative testing during Lockdown 1.0 – 4.0

Andhra Pradesh: % Share during Lockdown and Unlock Phases

Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	4	17	2
Unlock: 1.0 - 2.0	96	83	98

Gujarat: % Share during Lockdown and Unlock Phases

Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	41	25	26
Unlock: 1.0 - 2.0	59	75	74

Haryana: % Share during Lockdown and Unlock Phases

Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	4	17	5
Unlock: 1.0 - 2.0	96	83	95

Jammu & Kashmir: % Share during Lockdown and Unlock Phases

Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	7	25	10
Unlock: 1.0 - 2.0	93	75	90

Himachal Pradesh: % Share during Lockdown and Unlock Phases

Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	54	23	13
Unlock: 1.0 - 2.0	46	77	87

Karnataka: % Share during Lockdown and Unlock Phases

Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	2	19	2
Unlock: 1.0 - 2.0	98	81	98

Current Status

Cases: 1.13

Mn

Deaths: 30K

High Positivity

Growth rate

Trend in August

Karnataka

Kerala

West Bengal

High Mortality

Growth rate

Trend in August

Andhra Pradesh

Karnataka

Kerala

Kerala: % Share during Lockdown and Unlock Phases

Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	10	8	4
Unlock: 1.0 - 2.0	90	92	96

Maharashtra: % Share during Lockdown and Unlock Phases

Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	14	20	14.5
Unlock: 1.0 - 2.0	86	80	85.5

Punjab: % Share during Lockdown and Unlock Phases

Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	14	14	13
Unlock: 1.0 - 2.0	86	86	87

Tamil Nadu: % Share during Lockdown and Unlock Phases

Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	14	14	13
Unlock: 1.0 - 2.0	86	86	87

West Bengal: % Share during Lockdown and Unlock Phases

Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	14	19	13
Unlock: 1.0 - 2.0	86	81	87

August Projection: 2.0 Mn Cases; 50K deaths

COVID is spreading much faster and wider in EAG States than mega states

Assam: % Share during Lockdown and Unlock Phases

Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	3	9	3
Unlock: 1.0 - 2.0	97	91	97

Bihar: % Share during Lockdown and Unlock Phases

Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	6	11	7
Unlock: 1.0 - 2.0	94	89	93

Chattisgarh: % Share during Lockdown and Unlock Phases

Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	2	13	5
Unlock: 1.0 - 2.0	98	87	95

Jharkhand: % Share during Lockdown and Unlock Phases

Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	5	20	20
Unlock: 1.0 - 2.0	95	80	80

Madhya Pradesh: % Share during Lockdown and Unlock Phases

Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	38	20	20
Unlock: 1.0 - 2.0	62	80	80

Current Status

Cases: 0.4 Mn

Deaths: 5.4K

High Positivity

Growth rate

Trend in August

Bihar

Odisha

Jharkhand

High Mortality

Growth rate

Trend in August

Jharkhand

Odisha

Chattisgarh

Odisha: % Share during Lockdown and Unlock Phases

Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	4	28	5
Unlock: 1.0 - 2.0	96	72	95

Rajasthan: % Share during Lockdown and Unlock Phases

Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	27	24	19
Unlock: 1.0 - 2.0	73	76	81

Uttarakhand: % Share during Lockdown and Unlock Phases

Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	4	24	9
Unlock: 1.0 - 2.0	96	76	91

Uttar Pradesh: % Share during Lockdown and Unlock Phases

Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	13	12	8
Unlock: 1.0 - 2.0	87	88	92

August Projection: 1.3 Mn Cases; 11K deaths

MICRO States Death Per Million population is increasing. Close monitoring is vital



Arunachal Pradesh: % Share during Lockdown and Unlock Phases			
Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	0	7	0
Unlock: 1.0 - 2.0	100	93	100

Goa: % Share during Lockdown and Unlock Phases			
Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	0	10	1
Unlock: 1.0 - 2.0	100	90	99

Manipur: % Share during Lockdown and Unlock Phases			
Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	0	6	2
Unlock: 1.0 - 2.0	100	94	98

Meghalaya: % Share during Lockdown and Unlock Phases			
Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	0	6	3
Unlock: 1.0 - 2.0	100	94	97

Current Status
 # Cases: 14.4K
 # Deaths: 74

**High Positivity
 Growth rate
 Trend in August**
 Goa
 Meghalaya
 Sikkim

Mizoram: % Share during Lockdown and Unlock Phases			
Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	0	2	0
Unlock: 1.0 - 2.0	0	98	100

Tripura: % Share during Lockdown and Unlock Phases			
Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	0	12	5
Unlock: 1.0 - 2.0	100	88	95

Nagaland: % Share during Lockdown and Unlock Phases			
Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	0	4	0
Unlock: 1.0 - 2.0	0	96	100

Sikkim: % Share during Lockdown and Unlock Phases			
Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	0	9	0
Unlock: 1.0 - 2.0	0	91	100

August Projection: 40,000 Cases; 325 deaths

Union Territories: Testing Per Million Population is 37286, 2 times of National Average Testing!



Andaman & Nicobar: % Share during Lockdown and Unlock Phases			
Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	0	0	4
Unlock: 1.0 - 2.0	100	100	96

Current Status

Cases: 7860
Deaths: 62

Chandigarh: % Share during Lockdown and Unlock Phases			
Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	22	29	26
Unlock: 1.0 - 2.0	78	71	74

High Positivity Growth rate Trend in August

Puducherry
Andaman

Dadar & Nagar: % Share during Lockdown and Unlock Phases			
Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	0	30	1
Unlock: 1.0 - 2.0	0	70	99

High Mortality Growth rate Trend in August

Ladakh
Chandigarh

Ladakh: % Share during Lockdown and Unlock Phases			
Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	0	15	4
Unlock: 1.0 - 2.0	100	85	96

Puducherry: % Share during Lockdown and Unlock Phases			
Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	0	12	1
Unlock: 1.0 - 2.0	100	88	99

August Projection: 22,000 Cases; 175 deaths

Delhi: Growth Rate reduced, but virus spread and mortality continue to increase

Delhi: % Share during Lockdown and Unlock Phases			
Phase	Deaths	Tests	Cases
Lockdown 1.0 - 4.0	10	17	13
Unlock: 1.0 - 2.0	90	82	87

- **Fastest Turnaround – Growth Rate:** @ the end of LOCKDOWN 4.0, 7-Day Moving average growth rate Positive cases was 50%. @ the end of UNLOCK 2.0, the growth rate has dropped to below 5%. Similarly, weekly growth rate of mortality has dropped from 80% to 5%.
- **Highest Positivity and Mortality Per Million Population:** @ 7307 positivity and 213 mortality, highest amongst all states and Union Territories. We need to also factor that Delhi is the 2nd most populated city in the world.

If Delhi continues to reduce the positivity and mortality growth rate in the subsequent weeks, then it could lead India's destiny towards freedom from COVID.

Mega Cities: Analysis of Monthly Moving Average Growth Rate: July

Test Positivity Rate (%)	July: 30-Day Moving Average Growth Rate (%) : Per Million Population					
	Mega Cities	Testing	Positivity	Active	Recovery	Fatality
12	Delhi	77	41	-59	79	33
10	Ahmedabad	91	23	-4	30	8
18	Bengaluru Urban	171	588	421	1832	760
22	Mumbai	53	39	-17	64	32
19	Chennai	214	52	-49	109	107

Testing and Positivity Correlation:

- All the mega cities have aggressively increased the testing during July.
- Chennai inspite of testing maximum, it has set a benchmark by using ONLY RT-PCR test kits which is considered as gold standard for result reliability.

Recovery and Active cases:

- There is a synergy with recovery and active growth rate of all mega cities except Bengaluru, which could be due to highest surge positive cases amongst mega cities in July.

Fatality:

- The growth rate is concerning, except Ahmedabad which is having least mortality growth rate. August full month data could give clear picture on the efficacy of medical intervention in the mega cities.

COVID 19: Performance Scorecard: Statewise

Key Performance indicators:

- Testing Efficiency - Test Positivity Rate (TPR)
- Testing Coverage – Test Per Million Population
- Spread of Virus - Test Positivity Per Million (TPM)
- Treatment Efficiency – Case Fatality Rate (CFR)
- Impact of Measures - Death Per Million (DPM) – The ultimate measure of performance

Strategic Classification of Zones

Empowered Action Group (EAG) States *	Mega States	Micro States	Mega Cities	Union Territories
Assam	Andhra Pradesh	Tripura	Ahmedabad	Dadra & Nagar Haveli
Bihar	Gujarat	Manipur	Bengaluru	Chandigarh
Chhattisgarh	Haryana	Mizoram	Chennai	Daman & Diu
Jharkhand	Himachal Pradesh	Nagaland	Hyderabad	Puducherry
Madhya Pradesh	Jammu & Kashmir	Meghalaya	Kolkata	Delhi **
Orissa	Karnataka	Goa	Mumbai	Andaman & Nicobar
Rajasthan	Kerala	Sikkim	New Delhi	Lakshadweep
Uttarakhand	Maharashtra	Arunachal Pradesh		
Uttar Pradesh	Punjab			
* classified by Government of India. The key indicators are: High infant and maternal mortality	Tamil Nadu			** Delhi – State / UT / Mega City: Data / Performance shown separately
	Telangana			
	West Bengal			

Mega States: COVID 19 Management Performance Scorecard					
Mega States *	Test Positivity Rate	Test / Million Population	Positivity / Mn Population	Case Fatality Rate	Death Per Million
Andhra Pradesh	7.75	36299	2815	0.93	26.1
Gujarat	7.96	12215	972	3.92	38.1
Haryana	5.70	22075	1257	1.20	14.9
Himachal Pradesh	1.57	19657	315	0.57	1.7
Jammu & Kashmir	3.25	46856	1525	1.87	28.4
Karnataka	9.19	20795	1910	1.87	35.7
Kerala	3.11	21986	684	0.33	2.2
Maharashtra	19.68	17654	3474	3.56	123.6
Punjab	2.88	19560	563	2.49	14.0
Tamil Nadu	9.26	34754	3217	1.61	51.7
Telangana	0.15	10979	1618	0.81	13.1
West Bengal	0.08	8929	728	2.22	16.2
Mega States	9.58	20493	1963	2.30	45.2

EAG States: COVID 19 Management Performance Scorecard					
EAG States	Test Positivity Rate	Test / Million Population	Positivity / Mn Population	Case Fatality Rate	Death Per Million
Assam	4.48	26084	1170	0.25	2.9
Bihar	9.59	4549	436	0.57	2.5
Chattisgarh	3.12	10250	320	0.54	1.7
Jharkhand	3.95	7882	311	0.96	3.0
Madhya Pradesh	4.16	9127	380	2.66	10.1
Odisha	6.36	11335	721	0.67	4.8
Rajasthan	2.81	18826	530	1.60	8.5
Uttarakhand	4.33	15092	653	1.03	6.8
Uttar Pradesh	3.84	9725	373	1.87	7.0
EAG States	4.35	11221	488	1.27	6.2

Micro States: COVID 19 Management Performance Scorecard					
Micro States	Test Positivity Rate	Test / Million Population	Positivity / Mn Population	Case Fatality Rate	Death Per Million
Arunachal Pradesh	2.03	52435	1067	0.18	1.9
Goa	4.77	81995	3910	0.77	30.3
Manipur	3.78	23428	885	0.22	1.9
Meghalaya	2.87	8848	254	0.47	1.2
Mizoram	1.94	17081	331	0.00	0.00
Nagaland	4.77	17049	813	0.00	0.0
Sikkim	2.62	36926	966	0.15	1.4
Tripura	3.07	41043	1260	0.42	5.3
Micro States	3.44	37637	1294	0.43	5.5

Union Territories: COVID 19 Management Performance Scorecard					
Union Territories	Test Positivity Rate	Test / Million Population	Positivity / Mn Population	Case Fatality Rate	Death Per Million
Andaman & Nichobar	4.70	31937	1501	1.12	16.8
Chandigarh	7.73	11690	904	1.72	15.5
Dadar & Nagar	3.81	49467	1886	0.17	3.2
Ladakh	12.25	48768	5972	0.35	20.76
Puducherry	8.07	31199	2519	1.43	36.1
Union Territories	7.03	29667	2086	1.03	21.6

Dedication to the Nation

Proxima-PHFI Pandemic & Epidemic Management System (PPEMS) is a joint development of Proxima and Public Health Foundation of India (PHFI). PPEMS provides customised dashboard for stakeholders who are directly managing the pandemic.

Over last 15 weeks, PPEMS has been tested with the publicly available COVID 19 data. The system provides sharper insights on the emerging pattern of the Pandemic and systematically highlights regions which needs immediate and specific attention.

PPEMS is the voluntary efforts of researchers and analysts at Proxima and PHFI in dedication to the nation

Data source and disclaimer

1. 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>
2. Updated testing data of 4 mega cities (Ahmedabad, Bengaluru, Delhi, and Mumbai) are available in the public domain. Whereas, updated testing data of Chennai, Kolkata and Hyderabad is not to be found by our researchers. The analysis of average testing data has limitation with respect to data of 4 mega cities. Therefore, readers of this report need to factor for further inferences.
3. The user of this presentation is advised to revalidate the shared data from authorised public institutions.

For more details, send email to:

Mysore Sanjeev

Convenor

Project: Jeevanrakshe

email: jeevanrakshe1@gmail.com

Thank you