

COVID 19: Mega Cities: Trend Analysis

05 December 2020

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.

Project: Jeevan Raksha acknowledges the technical support and guidance of Public Health Foundation of India (**PHFI**)



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.

Mega Cities: Different Testing Strategies, Different Results

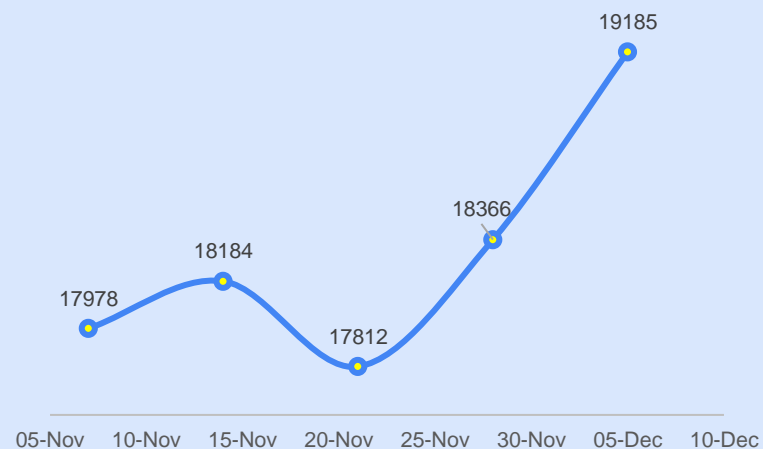
- Out of 4 Mn tests conducted by mega cities during 07 Nov – 05 Dec, 75% tests were carried out by Bengaluru and Delhi (1.36 Mn and 1.6 Mn tests respectively). Delhi's Gross Test Positivity Rate (including retests) of 9.8% reflects high symptomatic tests and also strained testing capacity. On the other hand, 1.9% of Bengaluru GTPR reflects improved testing capacity and high testing of low risk people.
- High testing yield of Delhi reflects improved quality of tracing and isolation. On the other hand, marginal increase in active cases in Bengaluru calls for immediate reviewing strengthening the testing process.
- Bengaluru has testing 3.78 Lacs / Mn population (TPM), highest among 5 mega cities. Followed by Delhi @ 3.56 lacs, Amdavad 2.88 Lacs, Chennai 1.87 Lacs and Mumbai 96K.

Mega Cities: Testing Analysis: November 2020						
Mega Cities	07-Nov	05-Dec	MGR	Incremental Testing	Incremental Cases	GTPR
Delhi	5050000	6670000	32	1620000	158760	9.8
Amdavad	1730000	2100000	21	370000	7986	2.2
Bengaluru	3298000	4660000	41	1362000	25543	1.9
Mumbai	1570000	1970000	25	400000	22218	5.6
Chennai	1790000	2060000	15	270000	12946	4.8
Mega Cities	13438000	17460000	30	4022000	250803	6.2

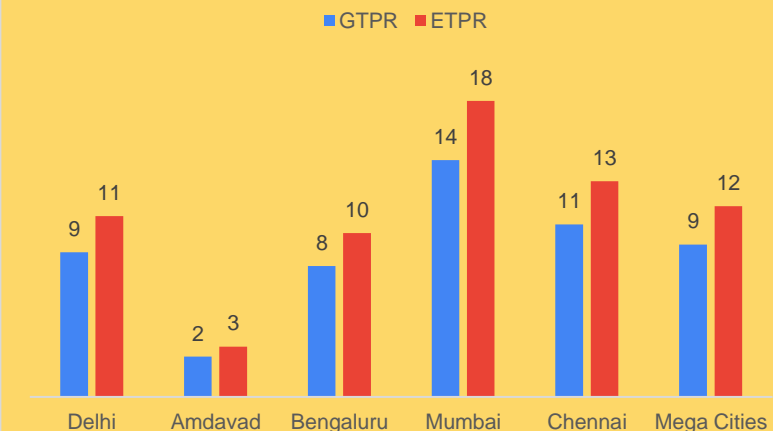
Delhi: Number of Active Cases



Bengaluru: Number of Active Cases



Mega Cities: Gross and Effective: Test Positivity Rate (%)



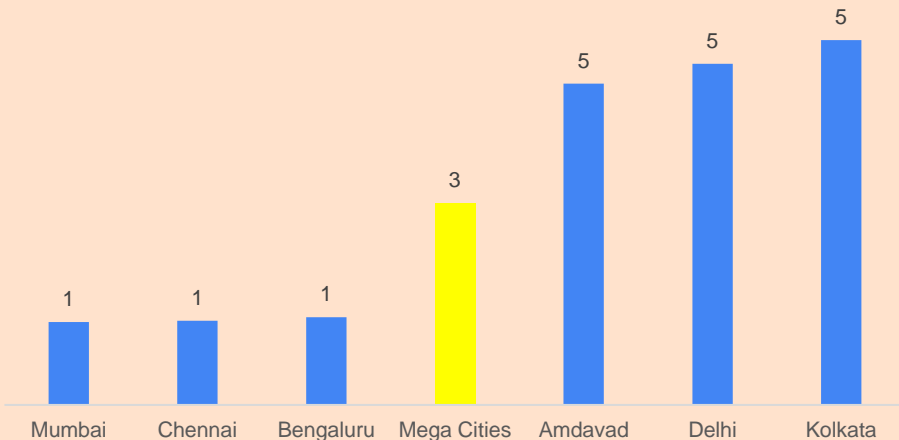
Mega Cities: Delhi adds 63% of the total new cases

- Till date, 3.2% and 3% of total population of Delhi and Bengaluru have tested positive for COVID
- 6 Mega cities contributes to 17% of the total COVID cases in India.
- During 07 Nov – 05 December, mega cities added 2.51 lacs of new COVID cases, of which 1.58 lacs (63%) was contributed by Delhi.
- Amdavad and Chennai added least number of COVID cases respectively
- Bengaluru and Mumbai contributed 9% and 10% respectively of the total incremental COVID cases during the said period

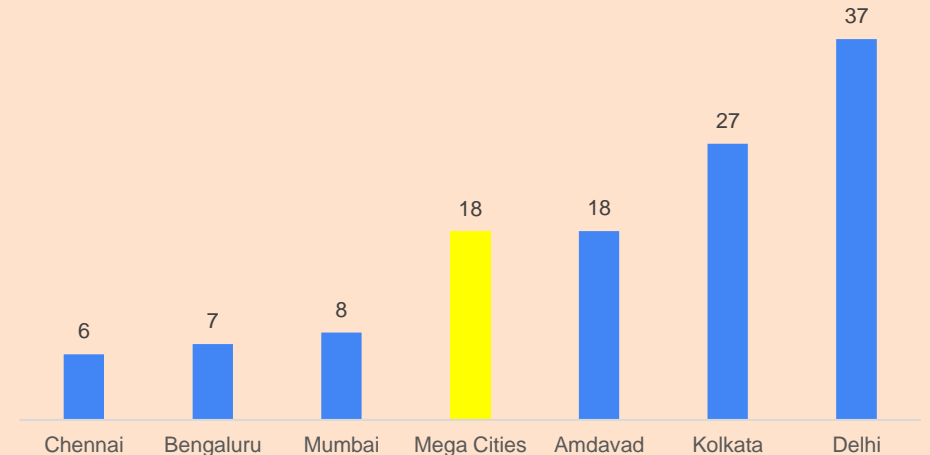
Mega Cities: Positive Cases: 7-Day Moving Growth Rate (%)					
Positivity	28-Nov	05-Dec	MGR	Increase	Share (%)
Amdavad	49420	51724	5	2304	5
Kolkata	105171	110737	5	5566	12
Chennai	214577	217204	1	2627	6
Mumbai	281881	285267	1	3386	7
Bengaluru	368604	373291	1	4687	10
Delhi	561742	589544	5	27802	60
Mega Cities	1581395	1627767	3	46372	
India	9393039	9644529	3	251490	

Mega Cities: Positive Cases: 28-Day Moving Growth Rate (%)					
Positivity	07-Nov	05-Dec	MGR	Increase	Share (%)
Amdavad	43738	51724	18	7986	3
Kolkata	87387	110737	27	23350	9
Chennai	204258	217204	6	12946	5
Mumbai	263049	285267	8	22218	9
Bengaluru	347748	373291	7	25543	10
Delhi	430784	589544	37	158760	63
Mega Cities	1376964	1627767	18	250803	
India	8507204	9644529	13	1137325	

Mega Cities: Positive Cases: 7-Day Moving Growth Rate (%)
(28 Nov - 05 Dec)



Mega Cities: Positive Cases: 28-Day Moving Growth Rate (%)
(07 Nov - 05 Dec)



Mega Cities Trend: Delhi Turns the tide, active cases drops nearly by a third



- Over the last 2 weeks, Delhi has been successful in bring down the active by nearly 15K, last week alone it has reduced the active cases by almost 10K
- Bengaluru after successfully bringing down the number of active cases as high as 65K to 20K within October/early November, over the last few weeks active cases have started gradually moving up.
- Active cases has dropped in Kolkata, Mumbai, Chennai, and Amdavad

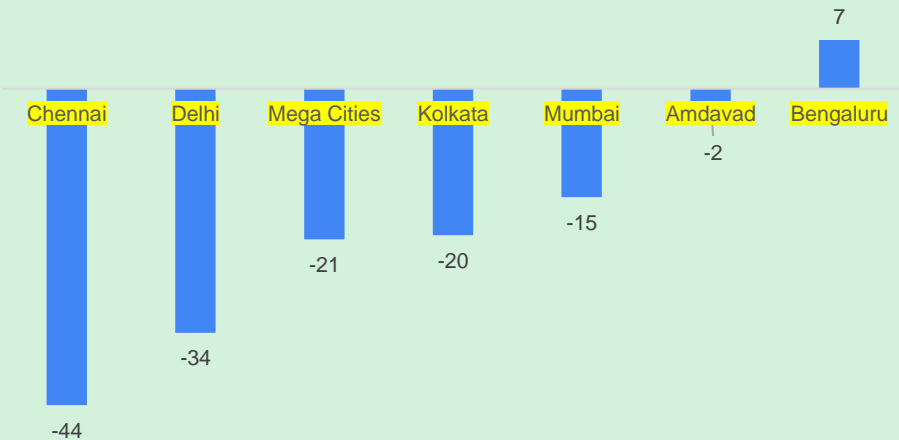
Mega Cities: Active Cases: 7-Day Moving Growth Rate (%)				
Positivity	28-Nov	05-Dec	MGR	Changes
Delhi	36578	26678	-27	-9900
Amdavad	3248	3120	-4	-128
Bengaluru	18366	19185	4	819
Mumbai	14979	14048	-6	-931
Chennai	3840	3339	-13	-501
Kolkata	6683	5905	-12	-778
Mega Cities	83694	72275	-14	-11419

Mega Cities: Active Cases: 28-Day Moving Average Cases				
Positivity	07-Nov	05-Dec	MGR	Changes
Delhi	40258	26678	-34	-13580
Chennai	5934	3339	-44	-2595
Mumbai	16528	14048	-15	-2480
Kolkata	7405	5905	-20	-1500
Amdavad	3187	3120	-2	-67
Bengaluru	17978	19185	7	1207
Mega Cities	91290	72275	-21	-19015

Mega Cities: Active Cases: 7-Day Moving Growth Rate (%) (28 Nov - 05 Dec)



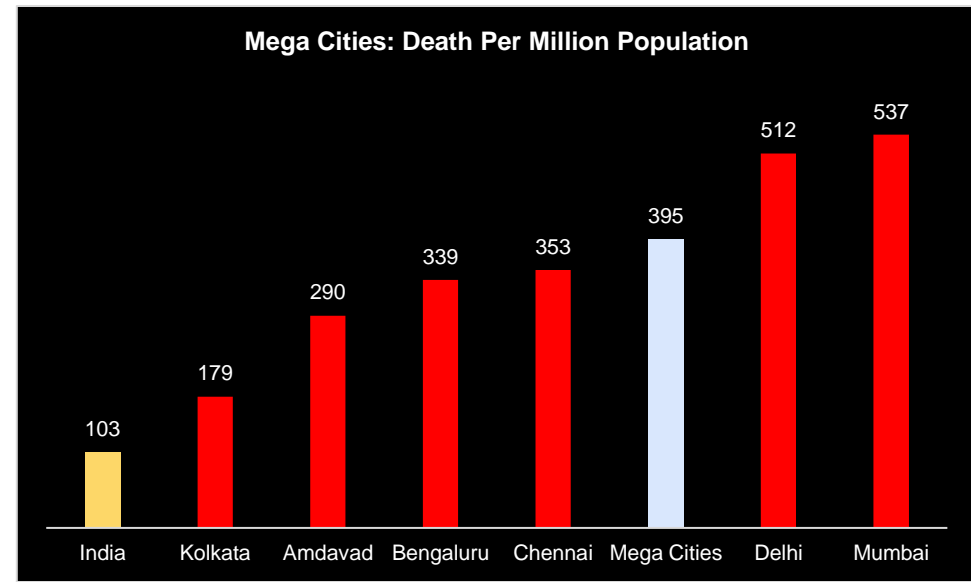
Mega Cities: Active Cases: 28-Day Moving Average Cases (07 Nov - 05 Dec)



Mega Cities Trend: 1 in every 5 COVID death in India has occurred in Delhi

- Almost 1 in every 4 COVID deaths in India has occurred in 6 mega cities.
- Delhi becomes the second mega city in India to cross 500 Death Per Million population, 5 times of national DPM of 103.
- Chennai adds the least to the total death toll amongst the mega cities
- In October, there were 928 COVID deaths in Bengaluru, whereas in November the total number sharply dropped to 273.
- Number of COVID deaths in Kolkata was marginally lower in November (402) when compared to October (496)
- Amadavad witnessed marginal increase in number of deaths in November (270) when compared to October (266).

Mega Cities: Mortality: 28-Day Moving Growth Rate (%)					
Mortality	07-Nov	05-Dec	MGR	Increase	Share (%)
Delhi	6912	9574	39	2662	64
Amdavad	1917	2109	10	192	5
Bengaluru	3945	4176	6	231	6
Mumbai	10422	10964	5	542	13
Chennai	3708	3868	4	160	4
Kolkata	2307	2665	16	358	9
Mega Cities	29211	33356	14	4145	
Pan India	126163	140216	11	14053	



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> / <https://coronavirus.jhu.edu/>
2. Updated testing data of 4 mega cities (Ahmedabad, Bengaluru, Chennai, Delhi, and Mumbai) are available in the public domain. Whereas, updated testing data of Kolkata and Hyderabad is not to be found by our researchers. The analysis of average testing data has limitation with respect to data of 5 mega cities. Therefore, readers of this report need to factor the same for further inferences.
3. Information related to current status of Telangana and its districts are not available in the public domain. Therefore, readers of this report need to factor the same for further inferences.
4. The user of this presentation is advised to revalidate the shared data from authorised public institutions.

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Thank you