

COVID 19: Mega Cities Trends and Analysis

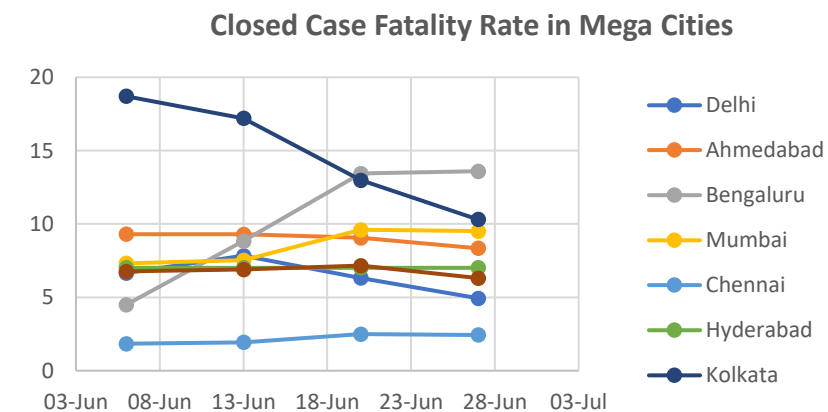
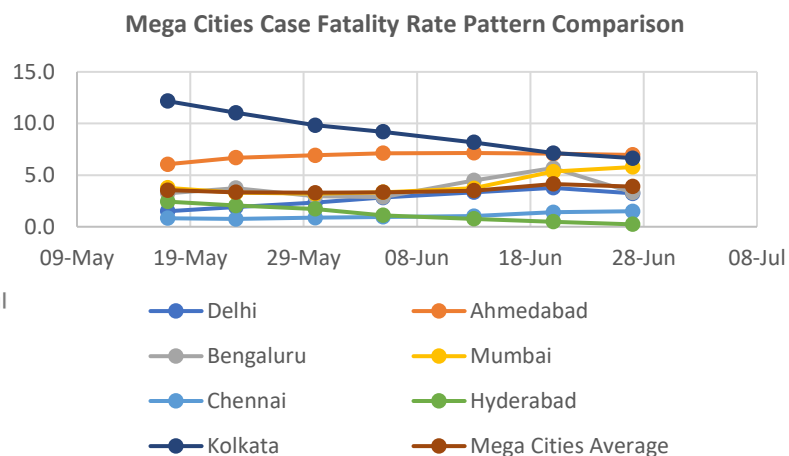
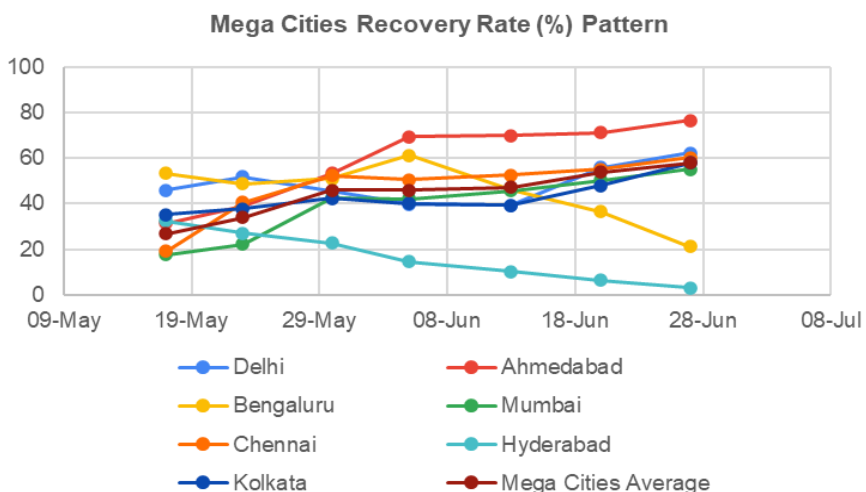
June 2019



Profile of 7 Mega Cities in India from COVID Management Point of view



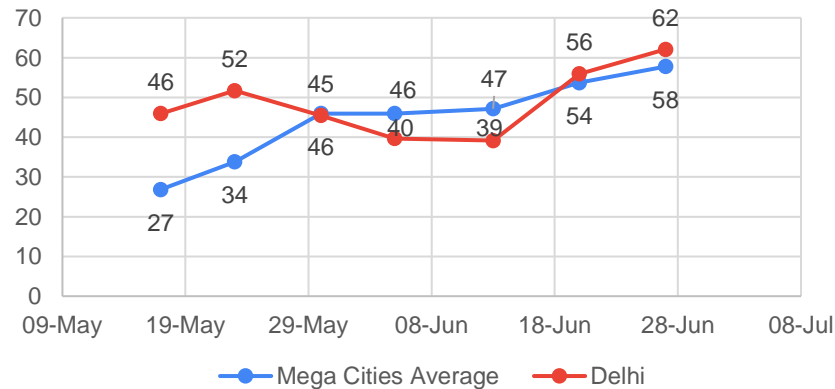
- Among the 50 most populated cities in the world. Mumbai and Delhi are 2nd and 3rd most populated cities in the world
- Constitutes 6% of India's total population
- Average Population density is 4280 / Sq Kms
- Occupies 0.5% of total land of India, currently has 10.6 COVID Positive case / Sq Km
- 45% of the COVID cases
- 55% COVID 19 deaths



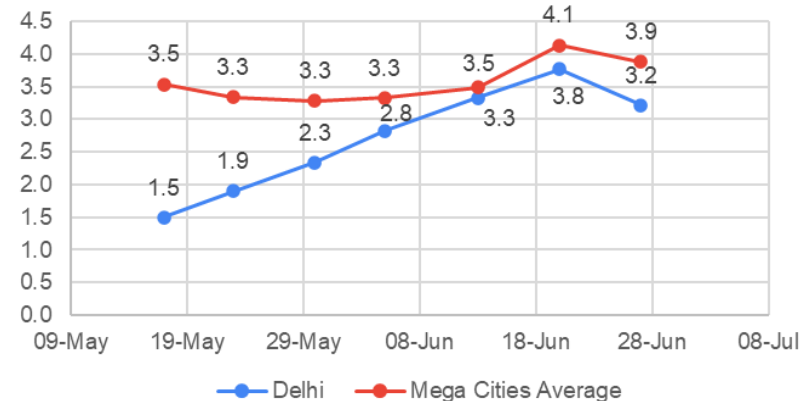
Analysis of Delhi COVID 19 Management in June 2020

- In June, Delhi has witnessed 200% increase in COVID cases. On week Ending 6th June, Delhi had 26866 COVID cases which increased to 79400 on 27th June.
- Delhi has witnessed a sharp increase in Case Recovery Rate (CRR) over the last 2 week. It has gone up from 39% to 62% which has translated in increase of recovery cases from 10664 to 39301.
- Case Fatality Rate (CFR) continues to be in the range of 3% – 3.8% during the same period. During this period the absolute value by over 100%.
- During the period, Delhi has reduced its Closed Case fatality rate from 8% to 5%. This indicates that there is increase in number of people recovering from the total closed cases.

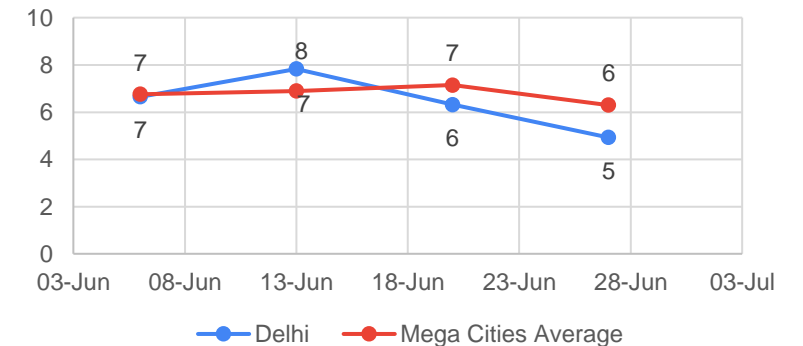
Delhi & Mega Cities Recovery Rate (%): Comparison



Delhi & Mega Cities Case Fatality Rate

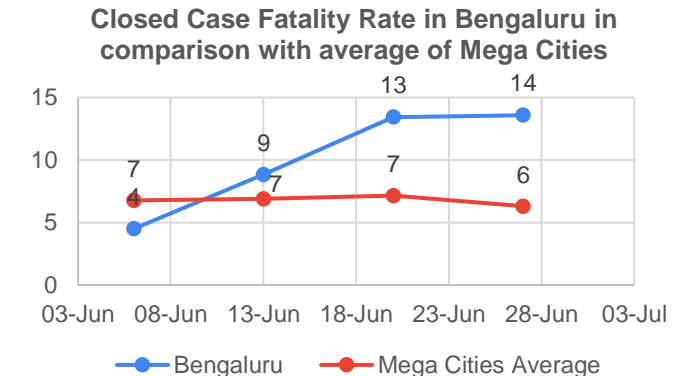
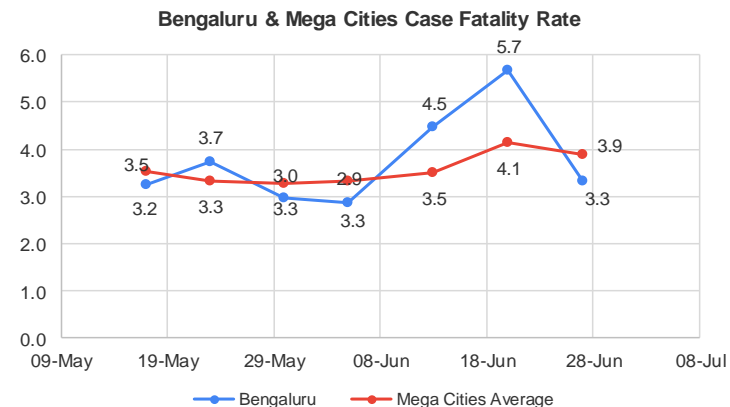
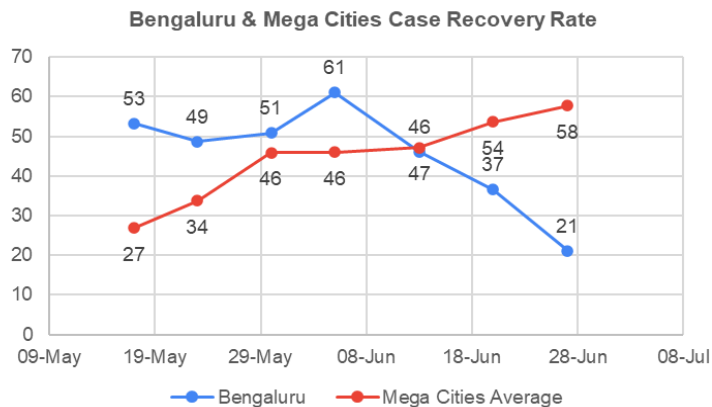


Closed Case Fatality Rate in Delhi in comparison with average of Mega Cities



Analysis of Bengaluru COVID 19 Management in June 2020

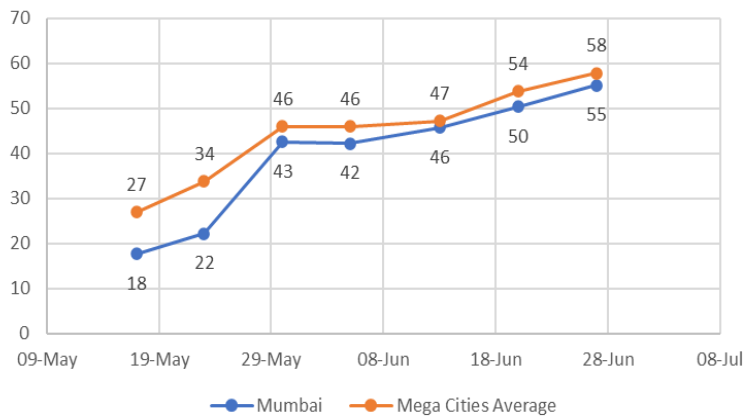
- Bengaluru witnessed its sharpest monthly increase of COVID cases. It witnessed increase by COVID cases by 460%, in terms of absolute value it increased from 451 to 2531.
- Spike in Case positivity had direct impact on Bengaluru's recovery rate which crashed from peak of 81% to 21%, whereas the average recovery rate of 7 mega cities increased from 46% to 58%.
- 30-day moving average of fatality growth rate is 546%. Number of deaths increased from 13 to 84.
- The fatality rate
- There is a drop in Case Fatality Rate from 5.7% to 3.3% due to step increase in absolute value.



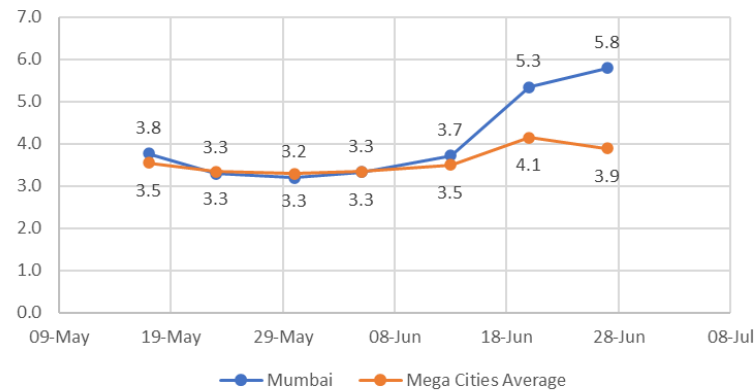
Analysis of Mumbai COVID 19 Management in June 2020

- The recovery rate is in line with the average recovery rate of mega cities
- Case Fatality Rate (CFR) has increased sharply in June from 3.7% to 5.8%. In June, the fatality increased by 165%, 1577 to 4179.
- In June, the Closed Case Fatality Rate (CCFR) has increased from 7% to 10% against 6% of average CCFR of mega cities

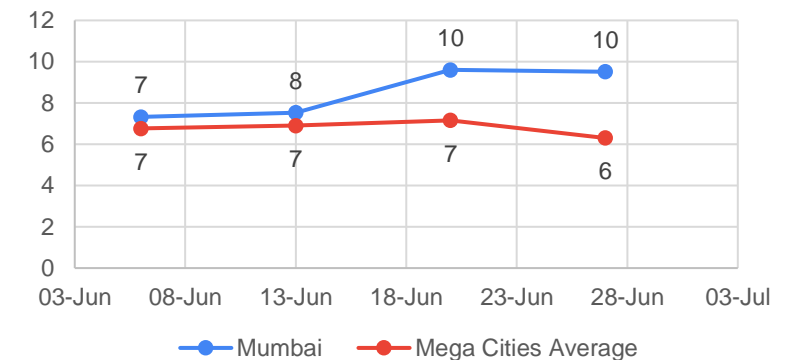
Mumbai & Mega Cities Case Recovery Rate



Mumbai & Mega Cities Case Fatality Rate



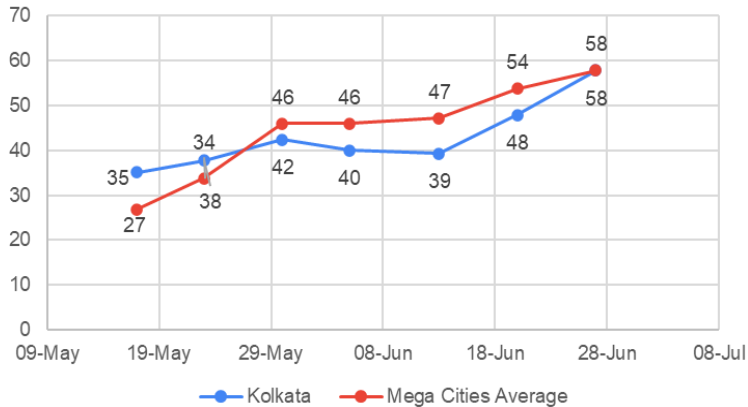
Closed Case Fatality Rate in Mumbai in comparison with average of Mega Cities



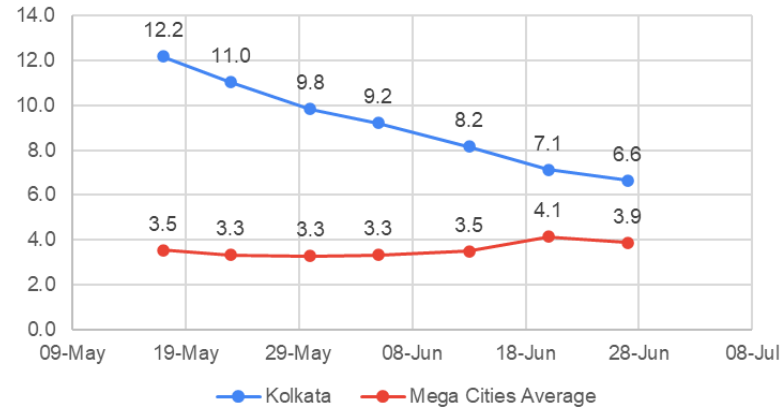
Analysis of Kolkata COVID 19 Management in June 2020

- Kolkata has shown improvement in all three areas – increase in recovery rate, reduction in both average fatality rate and closed case fatality rate.
- The Closed Case Fatality Rate (CCFR) has fallen sharply from 19% to 10%. Similarly, Case Fatality Rate (CFR) has fallen from 9.2% to 6.6% in June.

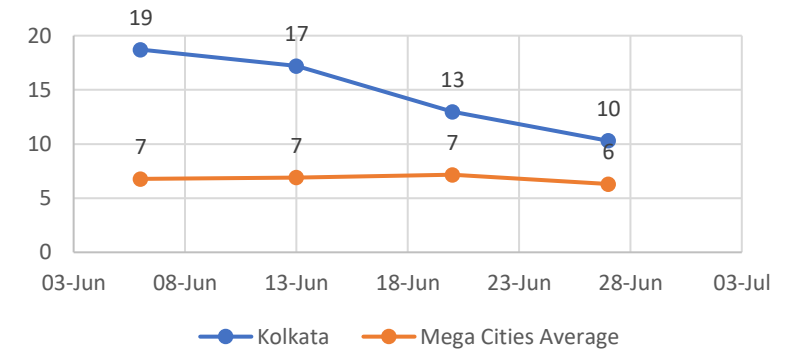
Kolkata & Mega Cities Case Recovery Rate



Mega Cities & Kolkata Case Fatality Rate

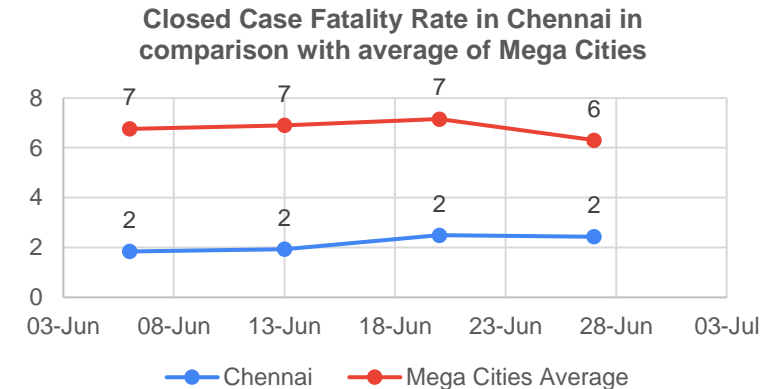
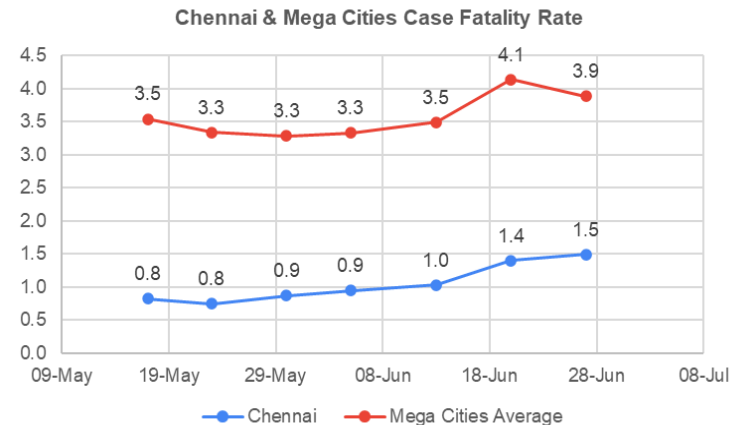
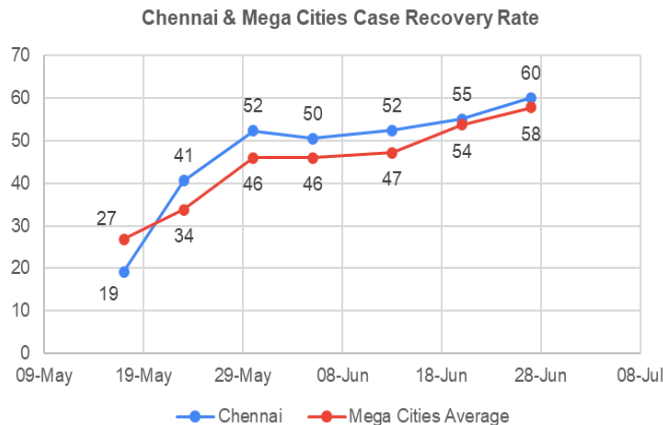


Closed Case Fatality Rate in Kolkata in comparison with average of Mega Cities



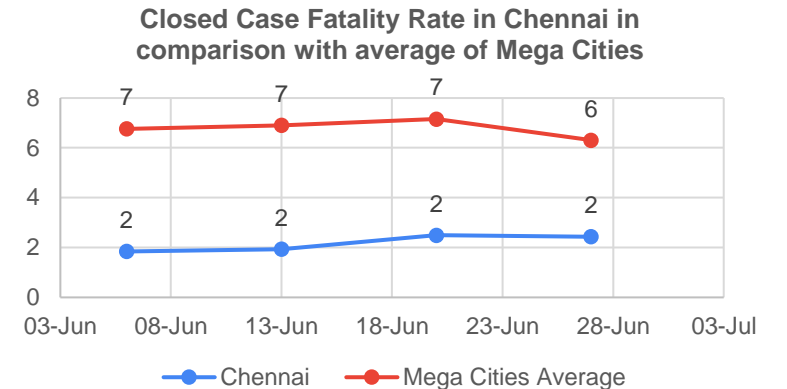
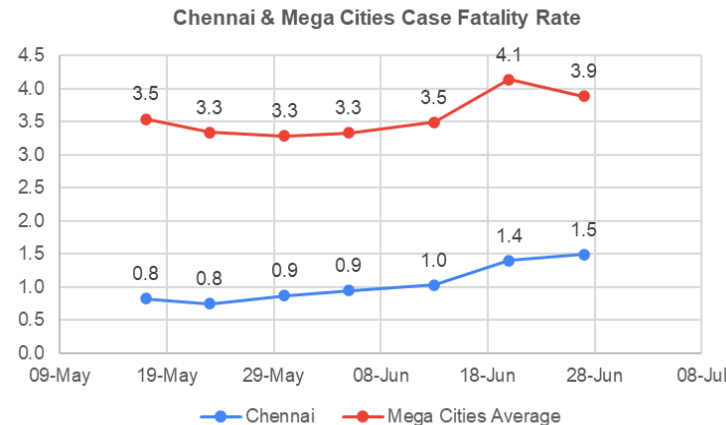
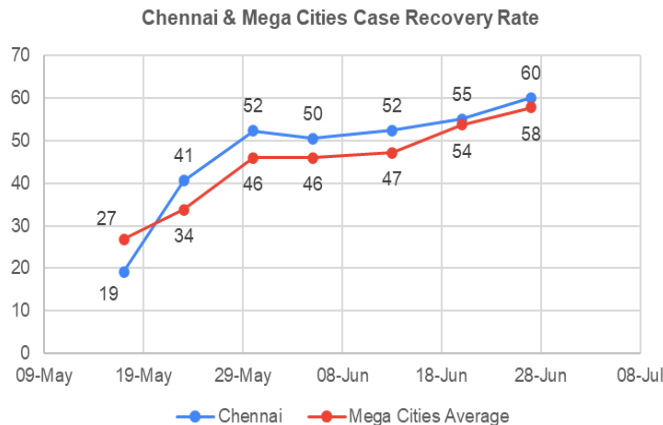
Analysis of Chennai COVID 19 Management in June 2020

- Inspite of 146% increase in COVID cases in June from 20955 to 51699, Chennai has the CFR of 1.4% against the average CFR of mega cities is 3.9%.
- The Case Recovery Rate (CRR) of Chennai is at 60% above the average CRR of the mega cities which is at 58%
- Closed Case Fatality Rate is at 2.5% below than the average of Mega Cities at 6%



Analysis of Chennai COVID 19 Management in June 2020

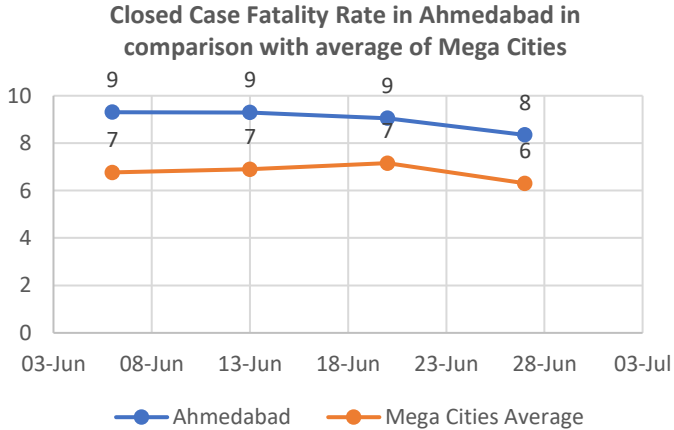
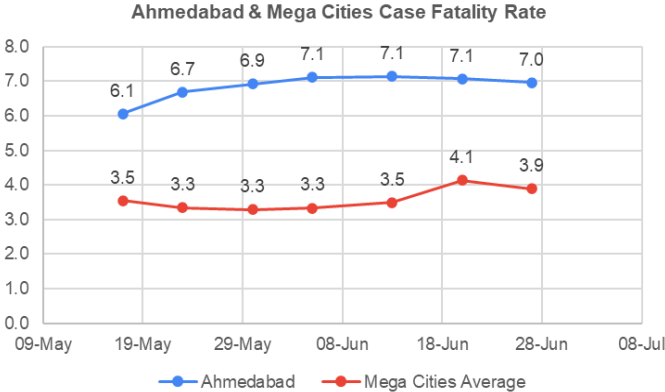
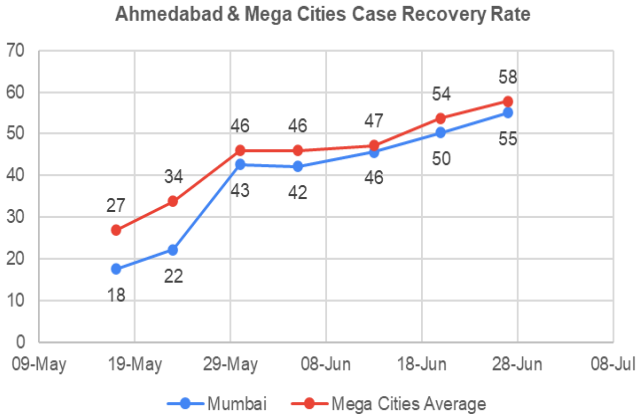
- In spite of 146% increase in COVID cases in June from 20955 to 51699, Chennai has the CFR of 1.4% against the average CFR of mega cities is 3.9%.
- The Case Recovery Rate (CRR) of Chennai is at 60% above the average CRR of the mega cities which is at 58%
- Closed Case Fatality Rate is at 2.5% below than the average of Mega Cities at 6%



Analysis of Ahmedabad COVID 19 Management in June 2020

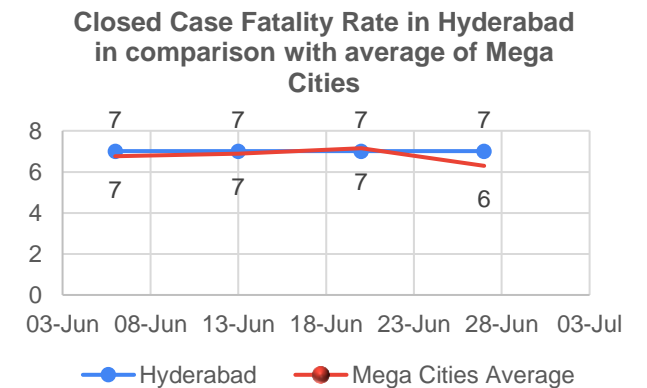
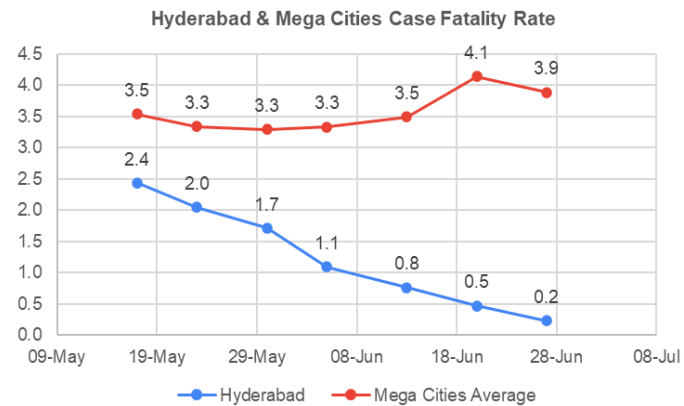
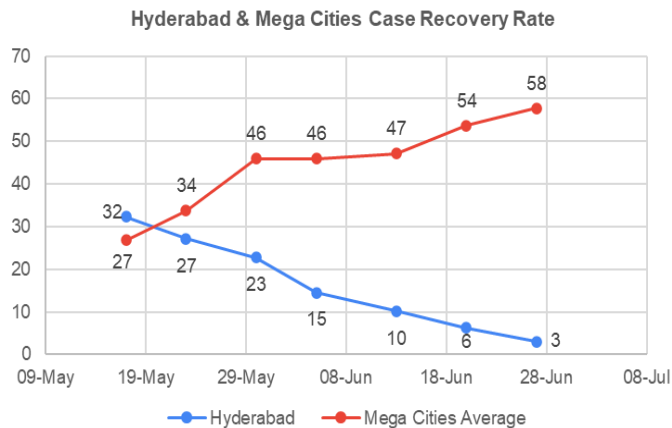


- Ahmedabad has shown improvement in Case Recovery Rate (CRR). It has increased from 42% in early June to 55%.
- In June, the number of COVID cases has increased by 45%, least growth rate amongst the cities. The number of Covid cases increased from 13967 to 20269
- The Case Fatality Rate is at 7% and Closed Case Fatality Rate (CCFR) is at 8%



Analysis of Hyderabad COVID 19 Management in June 2020

- Hyderabad data has no correlation with the average trend of mega cities.
- Hyderabad Case Recovery Rate is 3% whereas the average CRR of mega cities is 58%
- The Case Fatality Rate of Hyderabad is 0.2% whereas CFR of mega cities is 3.9%
- Hyderabad Closed Case Fatality Rate is at 7%, in line with average of mega cities
- According to <https://www.covid19india.org/>, in the Telangana districtwise list, there is “**Unknown Category**” wherein (-) 4798 is reflected as active cases and 223 deaths. Unless these cases are recognised with appropriate districts, it will be difficult to make reasonable inference with respect to Hyderabad situation.



Dedication to the Nation

PHFI – Proxima Pandemic & Epidemic Management System (PPEMS) is a joint development of Public Health Foundation of India (PHFI) and Proxima. PPEMS provides customised dashboard for respective stakeholders.

Over last 8 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 PHFI and Proxima in dedication to the nation

Initiative intent and disclaimer

1. This initiative is a voluntary initiative of PHFI and Proxima as part of Project Jeevan Rakshe in dedication to the nation.
2. This initiative does not involve any kind of commercial value proposition to any of the partner institutions or to the individuals involved
3. 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>
4. The user of this presentation is advised to revalidate the shared data from competent authorised agencies before using for any other purpose.

For more details, send email to:

Mr Mysore Sanjeev

Convenor

Project: Jeevanrakshe

email: jeevanrakshe1@gmail.com

Thank you