

COVID 19: Wave 2: Trend Analysis & Projection

15 April 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.

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.

COVID 19: Wave 2: Key Observations

- **Positive Cases Growth pattern:**

- **National:** India's COVID cases is expected to surge by nearly 1/4th during the period 11 Apr – 10 May and cross 17.3 Mn
- **Delhi** is likely to cross 1 Mn COVID cases.
- **Mega States:**
 - Andhra Pradesh and Kerala is expected to witness longer doubling period because of relatively lower Moving Growth Rate-MGR (%).
 - Maharashtra, Gujarat, and Punjab is likely to experience relatively faster doubling due to higher MGR, Maharashtra: 41%, Gujarat 38%, and Punjab 32%
- **EAG States:** COVID cases is likely to increase by over 35%.
 - Except Assam and Odisha other EAG States are likely to witness relatively higher brunt of COVID when compared with Mega States.
 - Jharkhand, Madhya Pradesh, Uttar Pradesh, and Chhattisgarh are expected to witness nearly 40-50% surge in COVID cases during 11 April – 10 May 2021.
 - In Uttarakhand, Rajasthan, and Bihar COVID cases is likely to increase by a third.
- **Micro States (North-East + Goa):** COVID cases is likely to increase by 10%
 - Goa is likely to witness increase of COVID cases by 1/4th
 - Among NE States, Sikkim and Mizoram is expected to witness relatively higher COVID cases
 - Manipur, Arunachal Pradesh, and Nagaland likely to witness less than 2% increase in COVID cases

COVID 19: Wave 2: Key Observations

- **Mortality Growth pattern:**

- Unfortunately, India is likely to witness around 12% increase in COVID deaths during 11 April – 10 May. The number of COVID death is expected to touch 1.9+ lakhs.
- Among Mega States, Maharashtra likely to highest incremental deaths of 7,000+ deaths, followed by Gujarat 1300+, and Punjab 1200+
 - Jammu & Kashmir and Himachal Pradesh are expected to witnesses lower number deaths when compared with other mega states
- EAG States will witness higher Mortality MGR 21% when compared with Mega States of 10% (Higher the MGR, faster will be the doubling period, vice-versa).
 - In Chattisgarh number of deaths is likely to shoot up to 8050, increase of 64% from 11th April.
 - Jharkhand is likely to witness 40% surge in number of deaths.
- Delhi is likely to witness incremental death of 1300 during the period.
- Number of deaths in Union Territories collectively will be less than 100
- Fortunately, North-East States is unlikely to witness COVID deaths during the period

COVID 19: Wave 2: Projections: 11 April – 10 May

The projection is an effort to help the Central and State Government to examine and initiate necessary steps by effectively mobilising the required resources and achieve the core objective of reducing mortality.

COVID 19: Wave 2: Positive Cases Projections: India and Zones

| 30-Day COVID Cases Growth Projection (+/- 5%) | | |
|---|-----------------|-----------------|
| Zones | 11-Apr | 11-May |
| Mega States | 9585959 | 12094000 |
| EAG States | 2938546 | 3963500 |
| Micro States | 180108 | 198700 |
| Union Territories | 94770 | 115600 |
| Delhi | 725197 | 1000000 |
| Total | 13524580 | 17371800 |

| 30-Day COVID Mortality Growth Projection (+/- 5%) | | |
|---|---------------|---------------|
| Zones | 11-Apr | 10-May |
| Mega States | 126738 | 139250 |
| EAG States | 28841 | 34875 |
| Micro States | 2061 | 2113 |
| Union Territories | 1285 | 1375 |
| Delhi | 11283 | 12600 |
| Total | 170208 | 190213 |

Positive Cases Growth Pattern:

Number of COVID cases in India is likely to reach **17.3 Mn** cases by 10 May 2021
3.85 Mn new cases, Mega states to contribute 2.5 Mn new cases (2/3) during 11 Apr – 10 May.

Mortality Growth Pattern

Number of COVID deaths in India is likely to reach **1.9 Lakhs** by 10 May 2021.
Mega States would contribute 12500 deaths, 62% of the total deaths in India during the period

COVID 19: Wave 2: Positive Cases Projections: States / UTs

| Mega States | Actual (11 April) | Projection (10 May) |
|------------------|-------------------|---------------------|
| Andhra Pradesh | 925401 | 1000000 |
| Gujarat | 347495 | 480000 |
| Haryana | 316881 | 390000 |
| Himachal Pradesh | 69686 | 84000 |
| Jammu & Kashmir | 138390 | 165000 |
| Karnataka | 1065290 | 1290000 |
| Kerala | 1167191 | 1300000 |
| Maharashtra | 3407245 | 4800000 |
| Punjab | 272772 | 360000 |
| Tamil Nadu | 933434 | 1100000 |
| Telangana | 327278 | 405000 |
| West Bengal | 614896 | 720000 |
| Total | 9585959 | 12094000 |

| EAG States | Actual (11 April) | Projection (10 May) |
|----------------|-------------------|---------------------|
| Assam | 220310 | 228500 |
| Bihar | 283229 | 375000 |
| Chattisgarh | 443297 | 685000 |
| Jharkhand | 139384 | 195000 |
| Madhya Pradesh | 338145 | 485000 |
| Odisha | 349561 | 375000 |
| Rajasthan | 363793 | 480000 |
| Uttar Pradesh | 692015 | 1000000 |
| Uttarakhand | 108812 | 140000 |
| Total | 2938546 | 3963500 |

| Micro States | Actual (11 April) | Projection (10 May) |
|-------------------|-------------------|---------------------|
| Arunachal Pradesh | 16882 | 17000 |
| Goa | 62304 | 77000 |
| Manipur | 29496 | 29700 |
| Meghalaya | 14274 | 15000 |
| Mizoram | 4612 | 5200 |
| Nagaland | 12405 | 12500 |
| Sikkim | 6405 | 7400 |
| Tripura | 33730 | 34900 |
| Total | 180108 | 198700 |

| Union Territories | Actual (11 April) | Projection (10 May) |
|----------------------|-------------------|---------------------|
| Andaman & Nicobar | 5190 | 5600 |
| Chandigarh | 30743 | 40000 |
| Dadra & Nagar Haveli | 4014 | 6000 |
| Ladakh | 10780 | 12000 |
| Puducherry | 44043 | 52000 |
| Total | 94770 | 115600 |

COVID 19: Wave 2: Mortality Projections: States / UTs

| Mega States | Actual (11 April) | Projection (10 May) |
|------------------|-------------------|---------------------|
| Andhra Pradesh | 7300 | 7600 |
| Gujarat | 4800 | 6100 |
| Haryana | 3268 | 3600 |
| Himachal Pradesh | 1102 | 1250 |
| Jammu & Kashmir | 2034 | 2150 |
| Karnataka | 12889 | 13600 |
| Kerala | 4784 | 5200 |
| Maharashtra | 57987 | 65000 |
| Punjab | 7507 | 8750 |
| Tamil Nadu | 12908 | 13450 |
| Telangana | 1759 | 1900 |
| West Bengal | 10400 | 10650 |
| Total | 126738 | 139250 |

| EAG States | Actual (11 April) | Projection (10 May) |
|----------------|-------------------|---------------------|
| Assam | 1118 | 1150 |
| Bihar | 1610 | 1700 |
| Chattisgarh | 4899 | 8050 |
| Jharkhand | 1213 | 1675 |
| Madhya Pradesh | 4184 | 4750 |
| Odisha | 1979 | 2000 |
| Rajasthan | 2926 | 3150 |
| Uttar Pradesh | 9152 | 10550 |
| Uttarakhand | 1760 | 1850 |
| Total | 28841 | 34875 |

| Union Territories | Actual (11 April) | Projection (10 May) |
|-------------------|-------------------|---------------------|
| Goa | 848 | 900 |
| Tripura | 390 | 390 |
| Manipur | 376 | 376 |
| Nagaland | 93 | 93 |
| Arunachal Pradesh | 56 | 56 |
| Meghalaya | 151 | 151 |
| Sikkim | 136 | 136 |
| Mizoram | 11 | 11 |
| Total | 2061 | 2113 |

| Union Territories | Actual (11 April) | Projection (10 May) |
|----------------------|-------------------|---------------------|
| Puducherry | 691 | 720 |
| Ladakh | 131 | 131 |
| Dadra & Nagar Haveli | 2 | 2 |
| Chandigarh | 399 | 460 |
| Andaman & Nicobar | 62 | 62 |
| Total | 1285 | 1375 |

ANNEXURE: 1

COVID 19: WAVE 1: Projection and Actuals: Snapshot (August 2020 – January 2021)

COVID 19: Wave 1: Zonewise Projections and Actuals: Positivity and Mortality



| 30-Day COVID Cases Growth Projection | | | | | | | | | | | | | | | | |
|--------------------------------------|----------------|----------------|----------------|-------------------------|----------------|----------------|-------------------------|----------------|----------------|-------------------------|-----------------|----------------|-------------------------|-----------------|-----------------|-------------------------|
| Consolidated | 16-Aug | 12-Sep | | %ge Actual of Projected | 12-Oct | | %ge Actual of Projected | 12-Nov | | %ge Actual of Projected | 12-Dec | | %ge Actual of Projected | 12-Jan | | %ge Actual of Projected |
| | Actuals | Projection | Actual | | Projections | Actuals | | Projections | Actuals | | Projections | Actuals | | Projections | Actuals | |
| Mega States | 1852408 | 3245361 | 3279953 | 101 | 5229600 | 5002180 | 96 | 6503100 | 6025325 | 93 | 6800000 | 6712696 | 99 | 7235000 | 7155680 | 99 |
| EAG States | 538721 | 1146000 | 1065505 | 93 | 1765000 | 1681197 | 95 | 2115400 | 2027541 | 96 | 2315000 | 2306290 | 100 | 2523000 | 2465664 | 98 |
| Micro States | 32020 | 61400 | 66477 | 108 | 124700 | 113834 | 91 | 144100 | 142017 | 99 | 164100 | 159616 | 97 | 172600 | 166739 | 97 |
| Union Territories | 15424 | 34200 | 35722 | 104 | 59200 | 57342 | 97 | 72400 | 66713 | 92 | 76900 | 73308 | 95 | 78400 | 76841 | 98 |
| Delhi | 151928 | 185000 | 209748 | 113 | 330000 | 311188 | 94 | 400000 | 467028 | 117 | 675000 | 605470 | 90 | 660000 | 630892 | 96 |
| Total | 2590501 | 4671961 | 4657405 | 100 | 7508500 | 7165741 | 95 | 9235000 | 8728624 | 95 | 10031000 | 9857380 | 98 | 10669000 | 10495816 | 98 |

| 30-Day COVID Mortality Projection | | | | | | | | | | | | | | | | |
|-----------------------------------|--------------|--------------|--------------|-------------------------|---------------|---------------|-------------------------|---------------|---------------|----------------------------|---------------|---------------|----------------------------|---------------|---------------|----------------------------|
| Consolidated | 16-Aug | 12-Sep | | %ge Actual of Projected | 12-Oct | | %ge Actual of Projected | 12-Nov | | %ge og Actual of Projected | 12-Dec | | %ge og Actual of Projected | 12-Jan | | %ge og Actual of Projected |
| | Actuals | Projection | Actual | | Projections | Actuals | | Projections | Actual | | Projections | Actual | | Projections | Actual | |
| Mega States | 39610 | 68268 | 61242 | 90 | 91525 | 85942 | 94 | 103605 | 98276 | 95 | 107500 | 106620 | 99 | 114500 | 112191 | 98 |
| EAG States | 5946 | 11325 | 10503 | 93 | 16950 | 16468 | 97 | 21480 | 20597 | 96 | 23500 | 23617 | 100 | 25785 | 25587 | 99 |
| Micro States | 185 | 345 | 555 | 161 | 1067 | 1076 | 101 | 1665 | 1501 | 90 | 1822 | 1772 | 97 | 2040 | 1920 | 94 |
| Union Territories | 170 | 389 | 539 | 139 | 1008 | 878 | 87 | 1110 | 1003 | 90 | 1128 | 1105 | 98 | 1275 | 1159 | 91 |
| Delhi | 4188 | 4700 | 4687 | 100 | 5500 | 5809 | 106 | 7000 | 7332 | 105 | 10300 | 9981 | 97 | 11500 | 10707 | 93 |
| Total | 50099 | 85027 | 77526 | 91 | 116050 | 110173 | 95 | 134860 | 128709 | 95 | 144250 | 143095 | 99 | 155100 | 151564 | 98 |

COVID 19: Wave 1: Mega States: Projections and Actuals: Positivity



| Mega States | 16-Aug | 12-Sep | | %ge Actual of Projected | 12-Oct | | %ge og Actual of Projected | 12-Nov | | %ge og Actual of Projected | 12-Dec | | %ge og Actual of Projected | 12-Jan | | %ge og Actual of Projected |
|------------------|----------------|----------------|----------------|-------------------------|----------------|----------------|----------------------------|-----------------|----------------|----------------------------|-----------------|----------------|----------------------------|-----------------|----------------|----------------------------|
| | Actuals | Projectio n | Actual | | Projectio n | Actual | | Projectio ns | Actual | | Projectio ns | Actual | | Projectio ns | Actual | |
| Andhra Pradesh | 281817 | 580000 | 547686 | 94 | 875000 | 758951 | 87 | 900000 | 849705 | 94 | 900000 | 875025 | 97 | 890000 | 885234 | 99 |
| Gujarat | 77663 | 100000 | 110971 | 111 | 150000 | 152764 | 102 | 190000 | 184964 | 97 | 220000 | 226508 | 103 | 255000 | 253161 | 99 |
| Haryana | 46410 | 60000 | 88332 | 147 | 160000 | 143221 | 90 | 170000 | 193111 | 114 | 280000 | 251402 | 90 | 280000 | 265391 | 95 |
| Himachal Pradesh | 3993 | 7000 | 8784 | 125 | 17000 | 17578 | 103 | 25000 | 28183 | 113 | 50000 | 48951 | 98 | 70000 | 56596 | 81 |
| Jammu & Kashmir | 28021 | 50000 | 50712 | 101 | 100000 | 84031 | 84 | 100000 | 100968 | 101 | 120000 | 115626 | 96 | 125000 | 122764 | 98 |
| Karnataka | 219926 | 450000 | 440411 | 98 | 700000 | 717915 | 103 | 1000000 | 855912 | 86 | 925000 | 900214 | 97 | 930000 | 928806 | 100 |
| Kerala | 42885 | 90000 | 102255 | 114 | 200000 | 295133 | 148 | 660000 | 508257 | 77 | 660000 | 664633 | 101 | 785000 | 819766 | 104 |
| Maharashtra | 584754 | 1000000 | 1015681 | 102 | 1750000 | 1535315 | 88 | 1875000 | 1736329 | 93 | 1850000 | 1876699 | 101 | 1975000 | 1974488 | 100 |
| Punjab | 30041 | 62000 | 74616 | 120 | 150000 | 124535 | 83 | 150000 | 139869 | 93 | 160000 | 159579 | 100 | 175000 | 169479 | 97 |
| Tamil Nadu | 332105 | 520000 | 491571 | 95 | 675000 | 661264 | 98 | 820000 | 752521 | 92 | 810000 | 797693 | 98 | 825000 | 827614 | 100 |
| Telangana | 91361 | 91361 | 152602 | NA | 152600 | 213084 | NA | 213100 | 254666 | 120 | 290000 | 277151 | 96 | 295000 | 290309 | 98 |
| West Bengal | 113432 | 235000 | 196332 | 84 | 300000 | 298389 | 99 | 400000 | 420840 | 105 | 535000 | 519215 | 97 | 630000 | 562072 | 89 |
| Total | 1852408 | 3245361 | 3279953 | 101 | 5229600 | 5002180 | 96 | 6503100 | 6025325 | 93 | 6800000 | 6712696 | 99 | 7235000 | 7155680 | 99 |

COVID 19: Wave 1: Mega States: Projections and Actuals: Mortality



| Mega States | 16-Aug | 12-Sep | | %ge Actual of Projected | 12-Oct | | %ge og Actual of Projected | 12-Nov | | %ge og Actual of Projected | 12-Dec | | %ge og Actual of Projected | 12-Jan | | %ge og Actual of Projected |
|------------------|--------------|--------------|--------------|-------------------------|--------------|--------------|----------------------------|---------------|--------------|----------------------------|---------------|---------------|----------------------------|---------------|---------------|----------------------------|
| | Actuals | Projectio n | Actual | | Projectio n | Actuals | | Projectio ns | Actual | | Projectio ns | Actual | | Projectio ns | Actual | |
| Andhra Pradesh | 2562 | 6250 | 4779 | 76 | 7000 | 6256 | 89 | 7000 | 6837 | 98 | 7150 | 7052 | 99 | 7125 | 7133 | 100 |
| Gujarat | 2765 | 3000 | 3181 | 106 | 3600 | 3577 | 99 | 3900 | 3785 | 97 | 3950 | 4160 | 105 | 5500 | 4350 | 79 |
| Haryana | 528 | 700 | 932 | 133 | 1800 | 1592 | 88 | 2000 | 1979 | 99 | 2450 | 2710 | 111 | 3200 | 2964 | 93 |
| Himachal Pradesh | 18 | 25 | 70 | 280 | 175 | 246 | 141 | 375 | 405 | 108 | 650 | 793 | 122 | 1190 | 949 | 80 |
| Jammu & Kashmir | 527 | 1500 | 854 | 57 | 1300 | 1333 | 103 | 1700 | 1566 | 92 | 1800 | 1793 | 100 | 2060 | 1912 | 93 |
| Karnataka | 3832 | 6700 | 7067 | 105 | 11200 | 10314 | 92 | 12800 | 11474 | 90 | 12000 | 11939 | 99 | 12200 | 12149 | 100 |
| Kerala | 147 | 400 | 411 | 103 | 800 | 1026 | 128 | 2000 | 1797 | 90 | 2600 | 2595 | 100 | 3350 | 3348 | 100 |
| Maharashtra | 19749 | 31000 | 28724 | 93 | 44000 | 40514 | 92 | 48000 | 45682 | 95 | 49000 | 48139 | 98 | 50000 | 50151 | 100 |
| Punjab | 771 | 4000 | 2212 | 55 | 4800 | 3860 | 80 | 4800 | 4412 | 92 | 5200 | 5057 | 97 | 5800 | 5456 | 94 |
| Tamil Nadu | 5641 | 9000 | 8234 | 91 | 10500 | 10314 | 98 | 12200 | 11440 | 94 | 12150 | 11883 | 98 | 12200 | 12236 | 100 |
| Telangana | 693 | 693 | 950 | 137 | 950 | 1228 | 129 | 1230 | 1393 | 113 | 1550 | 1489 | 96 | 1525 | 1568 | 103 |
| West Bengal | 2377 | 5000 | 3828 | 77 | 5400 | 5682 | 105 | 7600 | 7506 | 99 | 9000 | 9010 | 100 | 10350 | 9975 | 96 |
| Total | 39610 | 68268 | 61242 | 90 | 91525 | 85942 | 94 | 103605 | 98276 | 95 | 107500 | 106620 | 99 | 114500 | 112191 | 98 |

COVID 19: Wave 1: EAG States: Projections and Actuals: Positivity & Mortality



| EAG States | 16-Aug | 12-Sep | | %ge Actual of Projected | 12-Oct | | %ge og Actual of Projected | 12-Nov | | %ge og Actual of Projected | 12-Dec | | %ge og Actual of Projected | 12-Jan | | %ge og Actual of Projected |
|----------------|---------------|----------------|----------------|-------------------------|----------------|----------------|----------------------------|----------------|----------------|----------------------------|----------------|----------------|----------------------------|----------------|----------------|----------------------------|
| | Actuals | Projectio n | Actual | | Projectio n | Actuals | | Projectio ns | Actual | | Projectio ns | Actual | | Projectio ns | Actual | |
| Assam | 75559 | 165000 | 138339 | 84 | 215000 | 195304 | NA | 195400 | 209835 | 107 | 215000 | 214584 | 100 | 220000 | 216690 | 98 |
| Bihar | 101906 | 225000 | 155445 | 69 | 200000 | 197000 | 99 | 230000 | 225500 | 98 | 245000 | 242748 | 99 | 260000 | 257335 | 99 |
| Chattisgarh | 15045 | 25000 | 58643 | 235 | 145000 | 145247 | 100 | 225000 | 207740 | 92 | 265000 | 255761 | 97 | 300000 | 290813 | 97 |
| Jharkhand | 22672 | 50000 | 59040 | 118 | 110000 | 93035 | 85 | 115000 | 105493 | 92 | 112000 | 111366 | 99 | 115000 | 117088 | 102 |
| Madhya Pradesh | 44433 | 75000 | 83619 | 111 | 145000 | 148298 | 102 | 200000 | 180997 | 90 | 210000 | 222397 | 106 | 250000 | 249553 | 100 |
| Odisha | 57126 | 120000 | 143117 | 119 | 250000 | 254662 | 102 | 335000 | 305986 | 91 | 335000 | 323364 | 97 | 333000 | 332331 | 100 |
| Rajasthan | 59979 | 100000 | 99036 | 99 | 150000 | 161184 | 107 | 225000 | 219327 | 97 | 285000 | 289999 | 102 | 325000 | 313718 | 97 |
| Uttar Pradesh | 150061 | 365000 | 299045 | 82 | 500000 | 439161 | 88 | 520000 | 505424 | 97 | 565000 | 564132 | 100 | 610000 | 594175 | 97 |
| Uttarakhand | 11940 | 21000 | 29221 | 139 | 50000 | 47306 | 95 | 70000 | 67239 | 96 | 83000 | 81939 | 99 | 110000 | 93961 | 85 |
| Total | 538721 | 1146000 | 1065505 | 93 | 1765000 | 1681197 | 95 | 2115400 | 2027541 | 96 | 2315000 | 2306290 | 100 | 2523000 | 2465664 | 98 |

| EAG States | 16-Aug | 12-Sep | | %ge Actual of Projected | 12-Oct | | %ge og Actual of Projected | 12-Nov | | %ge og Actual of Projected | 12-Dec | | %ge og Actual of Projected | 12-Jan | | %ge og Actual of Projected |
|----------------|-------------|--------------|--------------|-------------------------|--------------|--------------|----------------------------|--------------|--------------|----------------------------|--------------|--------------|----------------------------|--------------|--------------|----------------------------|
| | Actuals | Projecti on | Actual | | Projecti on | Actuals | | Projecti ons | Actual | | Projecti ons | Actual | | Projecti ons | Actual | |
| Assam | 182 | 400 | 430 | 108 | 900 | 826 | NA | 830 | 958 | 115 | 1050 | 1000 | 95 | 1030 | 1064 | 103 |
| Bihar | 515 | 1100 | 797 | 72 | 1100 | 955 | 87 | 1100 | 1167 | 106 | 1350 | 1317 | 98 | 1440 | 1443 | 100 |
| Chattisgarh | 134 | 525 | 518 | 99 | 1600 | 1286 | 80 | 2350 | 2527 | 108 | 3100 | 3084 | 99 | 3500 | 3517 | 100 |
| Jharkhand | 229 | 500 | 532 | 106 | 900 | 798 | 89 | 1000 | 917 | 92 | 1000 | 995 | 100 | 1030 | 1048 | 102 |
| Madhya Pradesh | 1094 | 1500 | 1691 | 113 | 2500 | 2645 | 106 | 3600 | 3065 | 85 | 3350 | 3391 | 101 | 3630 | 3726 | 103 |
| Odisha | 386 | 800 | 658 | 82 | 1000 | 1093 | 109 | 1500 | 1536 | 102 | 2000 | 1855 | 93 | 1975 | 1947 | 99 |
| Rajasthan | 862 | 1200 | 1207 | 101 | 1650 | 1665 | 101 | 2150 | 2032 | 95 | 2400 | 2568 | 107 | 2930 | 2739 | 93 |
| Uttar Pradesh | 2393 | 5000 | 4282 | 86 | 6600 | 6438 | 98 | 7700 | 7302 | 95 | 8000 | 8056 | 101 | 8650 | 8514 | 98 |
| Uttarakhand | 151 | 300 | 388 | 129 | 700 | 762 | 109 | 1250 | 1093 | 87 | 1250 | 1351 | 108 | 1600 | 1589 | 99 |
| Total | 5946 | 11325 | 10503 | 93 | 16950 | 16468 | 97 | 21480 | 20597 | 96 | 23500 | 23617 | 100 | 25785 | 25587 | 99 |

COVID 19: Wave 1: Micro States: Projections and Actuals: Positivity & Mortality

| Micro States | 16-Aug | 12-Sep | | %ge Actual of Projected | 12-Oct | | %ge og Actual of Projected | 12-Nov | | %ge og Actual of Projected | 12-Dec | | %ge og Actual of Projected | 12-Dec | | %ge og Actual of Projected |
|--------------|-------------------|--------------|--------------|-------------------------|---------------|---------------|----------------------------|---------------|---------------|----------------------------|---------------|---------------|----------------------------|---------------|------------|----------------------------|
| | | Actuals | Projection | | Actual | Projection | | Actual | Projection | | Actual | Projection | | Actual | Projection | |
| | Arunachal Pradesh | 2658 | 4500 | 5825 | 129 | 11000 | 12367 | 112 | 19000 | 15701 | 83 | 17700 | 16504 | 93 | 16900 | 16782 |
| Goa | 11339 | 23500 | 23445 | 100 | 45000 | 38674 | 86 | 51000 | 45605 | 89 | 50000 | 49305 | 99 | 51500 | 51983 | 101 |
| Manipur | 4390 | 7500 | 7579 | 101 | 11000 | 13556 | 123 | 20000 | 21211 | 106 | 29000 | 27036 | 93 | 31500 | 28725 | 91 |
| Meghalaya | 1292 | 2250 | 3447 | 153 | 6000 | 7771 | 130 | 12400 | 10512 | 85 | 13300 | 12743 | 96 | 15000 | 13651 | 91 |
| Mizoram | 777 | 1600 | 1379 | 86 | 3700 | 2184 | 59 | 2600 | 3242 | 125 | 4300 | 4024 | 94 | 4200 | 4299 | 102 |
| Nagaland | 3340 | 7000 | 4946 | 71 | 10000 | 7240 | 72 | 9500 | 9615 | 101 | 10300 | 11676 | 113 | 14000 | 11997 | 86 |
| Sikkim | 1148 | 2000 | 2026 | 101 | 3000 | 3367 | 112 | 4600 | 4369 | 95 | 5500 | 5316 | 97 | 6000 | 5996 | 100 |
| Tripura | 7076 | 12200 | 17830 | 146 | 35000 | 28675 | 82 | 25000 | 31762 | 127 | 34000 | 33012 | 97 | 33500 | 33306 | 99 |
| Total | 32020 | 60550 | 66477 | 110 | 124700 | 113834 | 91 | 144100 | 142017 | 99 | 164100 | 159616 | 97 | 172600 | 166739 | 97 |

| Micro States | 16-Aug | 12-Sep | | %ge Actual of Projected | 12-Oct | | %ge og Actual of Projected | 12-Nov | | %ge og Actual of Projected | 12-Dec | | %ge og Actual of Projected | 12-Jan | | %ge og Actual of Projected |
|-------------------|------------|------------|------------|-------------------------|-------------|-------------|----------------------------|------------|--------|----------------------------|------------|--------|----------------------------|------------|--------|----------------------------|
| | Actuals | Projection | Actual | | Projection | Actual | | Projection | Actual | | Projection | Actual | | Projection | Actual | |
| Goa | 98 | 240 | 276 | 115 | 525 | 511 | 97 | 750 | 656 | 87 | 800 | 705 | 88 | 730 | 749 | 103 |
| Tripura | 55 | 60 | 182 | 303 | 375 | 314 | 84 | 400 | 356 | 89 | 400 | 372 | 93 | 400 | 385 | 96 |
| Manipur | 13 | 20 | 44 | 220 | 100 | 93 | 93 | 150 | 207 | 138 | 300 | 322 | 107 | 415 | 365 | 88 |
| Nagaland | 7 | 9 | 8 | 89 | 10 | 13 | 130 | 40 | 50 | 125 | 60 | 68 | 113 | 100 | 84 | 84 |
| Arunachal Pradesh | 5 | 7 | 10 | 143 | 12 | 24 | 200 | 85 | 47 | 55 | 60 | 55 | 92 | 80 | 56 | 70 |
| Meghalaya | 6 | 7 | 24 | 343 | 30 | 64 | 213 | 90 | 98 | 109 | 100 | 125 | 125 | 155 | 143 | 92 |
| Sikkim | 1 | 1 | 11 | 1100 | 15 | 57 | 380 | 150 | 85 | 57 | 100 | 118 | 118 | 150 | 129 | 86 |
| Mizoram | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | #DIV/0! | 2 | 7 | 350 | 10 | 9 | 90 |
| Total | 185 | 345 | 555 | 161 | 1067 | 1076 | 101 | 1665 | 1501 | 90 | 1822 | 1772 | 97 | 2040 | 1920 | 94 |

COVID 19: Wave 1: Union Territories: Projections and Actuals: Positivity & Mortality



| Union Territories | 16-Aug | 12-Sep | | %ge Actual of Projected | 12-Oct | | %ge og Actual of Projected | 12-Nov | | %ge og Actual of Projected | 12-Dec | | %ge og Actual of Projected | 12-Jan | | %ge og Actual of Projected |
|----------------------|--------------|--------------|--------------|-------------------------|--------------|--------------|----------------------------|--------------|--------------|----------------------------|--------------|--------------|----------------------------|--------------|--------------|----------------------------|
| | Actuals | Projectio n | Actual | | Projectio n | Actual | | Projectio ns | Actual | | Projectio ns | Actual | | Projectio ns | Actual | |
| Andaman & Nichobar | 2306 | 6500 | 3494 | 54 | 4500 | 4023 | 89 | 4400 | 4507 | 102 | 5000 | 4805 | 96 | 5000 | 4966 | 99 |
| Chandigarh | 2009 | 3500 | 7292 | 208 | 17000 | 13264 | 78 | 15500 | 15543 | 100 | 18500 | 18572 | 100 | 20000 | 20378 | 102 |
| Dadra & Nagar Haveli | 1846 | 3200 | 2682 | 84 | 3500 | 3167 | 90 | 3500 | 3273 | 94 | 4400 | 3349 | 76 | 5400 | 3368 | 62 |
| Ladakh | 1909 | 3000 | 3228 | 108 | 4200 | 5151 | 123 | 7000 | 7211 | 103 | 10000 | 9138 | 91 | 10000 | 9634 | 96 |
| Puducherry | 7354 | 18000 | 19026 | 106 | 30000 | 31737 | 106 | 42000 | 36179 | 86 | 39000 | 37444 | 96 | 38000 | 38495 | 101 |
| Total | 15424 | 34200 | 35722 | 104 | 59200 | 57342 | 97 | 72400 | 66713 | 92 | 76900 | 73308 | 95 | 78400 | 76841 | 98 |

| Union Territories | 16-Aug | 12-Sep | | %ge Actual of Projected | 12-Oct | | %ge Actual of Projected | 12-Nov | | %ge Actual of Projected | 12-Dec | | %ge Actual of Projected | 12-Jan | | %ge Actual of Projected |
|----------------------|------------|-------------|------------|-------------------------|-------------|------------|-------------------------|--------------|-------------|-------------------------|--------------|-------------|-------------------------|--------------|-------------|-------------------------|
| | Actuals | Projectio n | Actual | | Projectio n | Actual | | Projectio ns | Actual | | Projectio ns | Actual | | Projectio ns | Actual | |
| Puducherry | 106 | 270 | 365 | 135 | 750 | 565 | 75 | 650 | 607 | 93 | 650 | 619 | 95 | 650 | 639 | 98 |
| Ladakh | 10 | 15 | 38 | 253 | 45 | 64 | 142 | 90 | 89 | 99 | 100 | 123 | 123 | 150 | 128 | 85 |
| Dadra & Nagar Haveli | 2 | 4 | 2 | 50 | 3 | 2 | 67 | 30 | 2 | 7 | 3 | 2 | 67 | 25 | 2 | 8 |
| Chandigarh | 28 | 50 | 83 | 166 | 150 | 192 | 128 | 250 | 244 | 98 | 300 | 300 | 100 | 360 | 328 | 91 |
| Andaman & Nichobar | 24 | 50 | 51 | 102 | 60 | 55 | 92 | 90 | 61 | 68 | 75 | 61 | 81 | 90 | 62 | 69 |
| Total | 170 | 389 | 539 | 139 | 1008 | 878 | 87 | 1110 | 1003 | 90 | 1128 | 1105 | 98 | 1275 | 1159 | 91 |

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