Cambridge Judge Business School
Cambridge Centre for Health Leadership & Enterprise

COVID-19 TRACKER: INDIA

16 April 2022

Centre for Health Leadership & Enterprise
UNIVERSITY OF CAMBRIDGE Judge Business School
HSTP Health Systems Transformation Platform
National Institute of Economic and Social Research

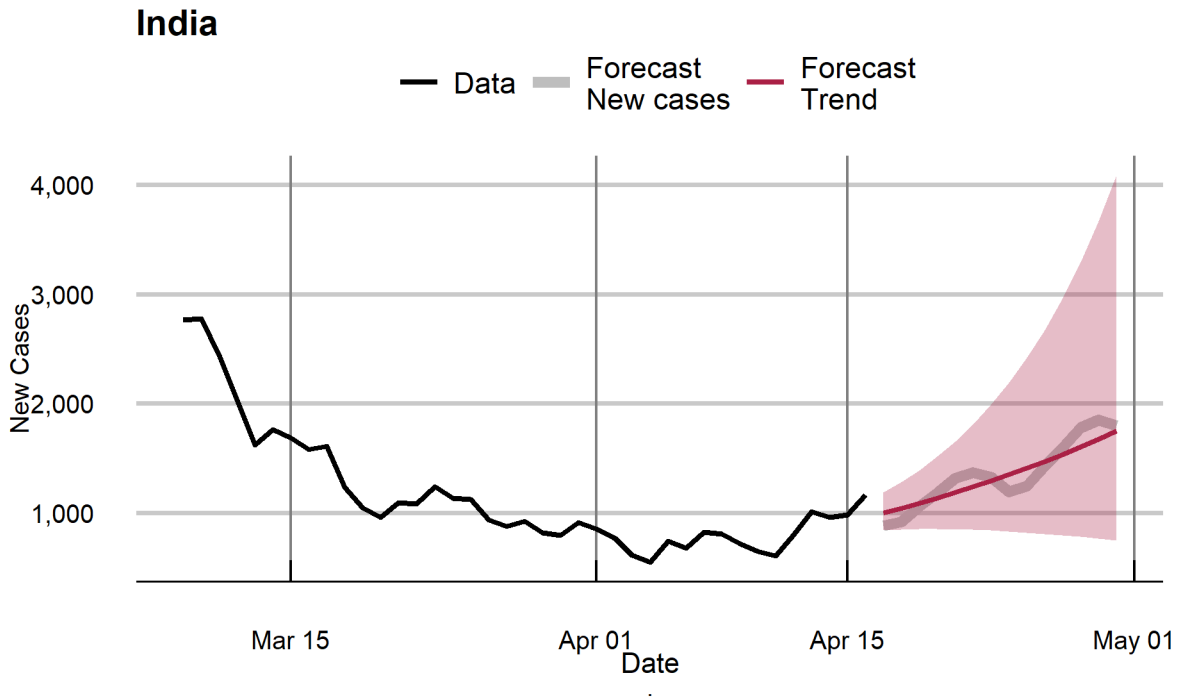
The Government of Kerala stopped publishing daily COVID case numbers on 11th April 2022, noting that the pandemic has ceased to be a worry in the state. Hence this edition of the tracker works with the data series for India excluding Kerala state.

*The filtered daily growth rate of new covid cases reported in **India** (excluding Kerala state) rose to 4.3% per day as on 16 April, having broken a 12 week long spell of decline earlier in the past week. Cases in India (excluding Kerala) are likely to double to around 2000 per day by the end of April (rising from around 1000 per day currently).*

***Delhi** (13.1% per day), **Haryana** (12.5% per day) and **Uttar Pradesh** (14.8% per day) are currently experiencing extremely high daily growth rates of reported case numbers and also have non-negligible daily case numbers. Case numbers remain very small in other Indian states.*

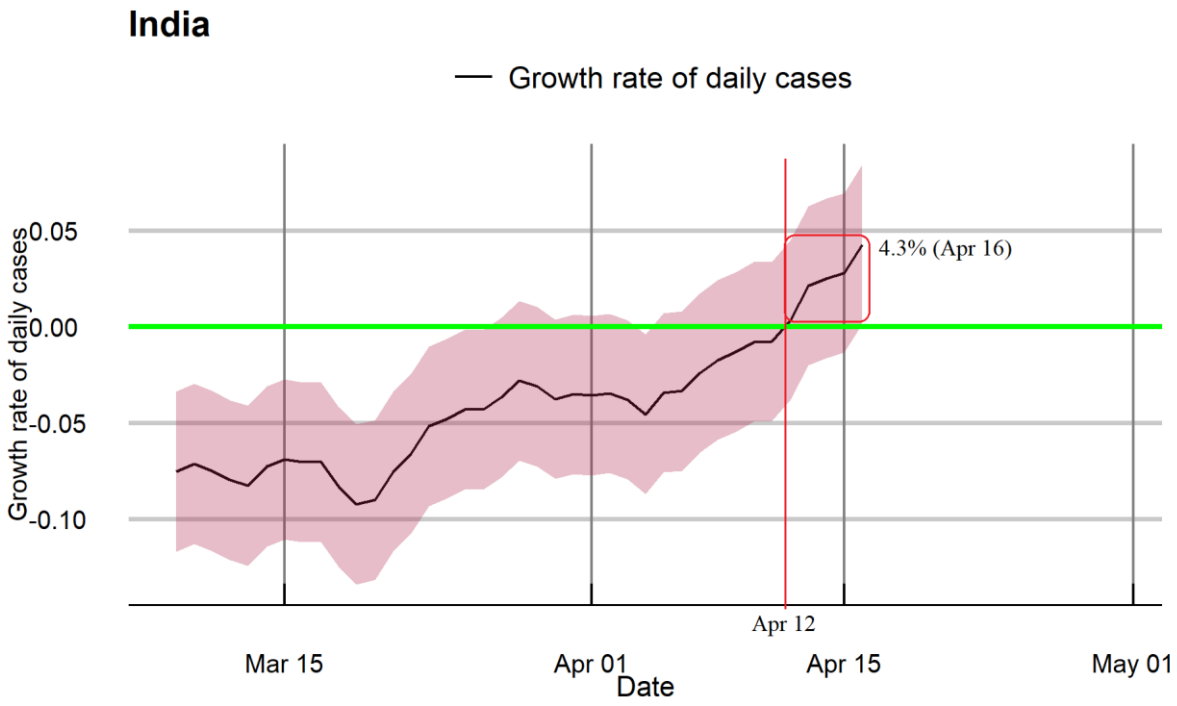
Daily Covid-19 cases in India

Forecast for India excluding Kerala state



Filtered daily growth rate of COVID-19 cases in India

(excluding Kerala state)

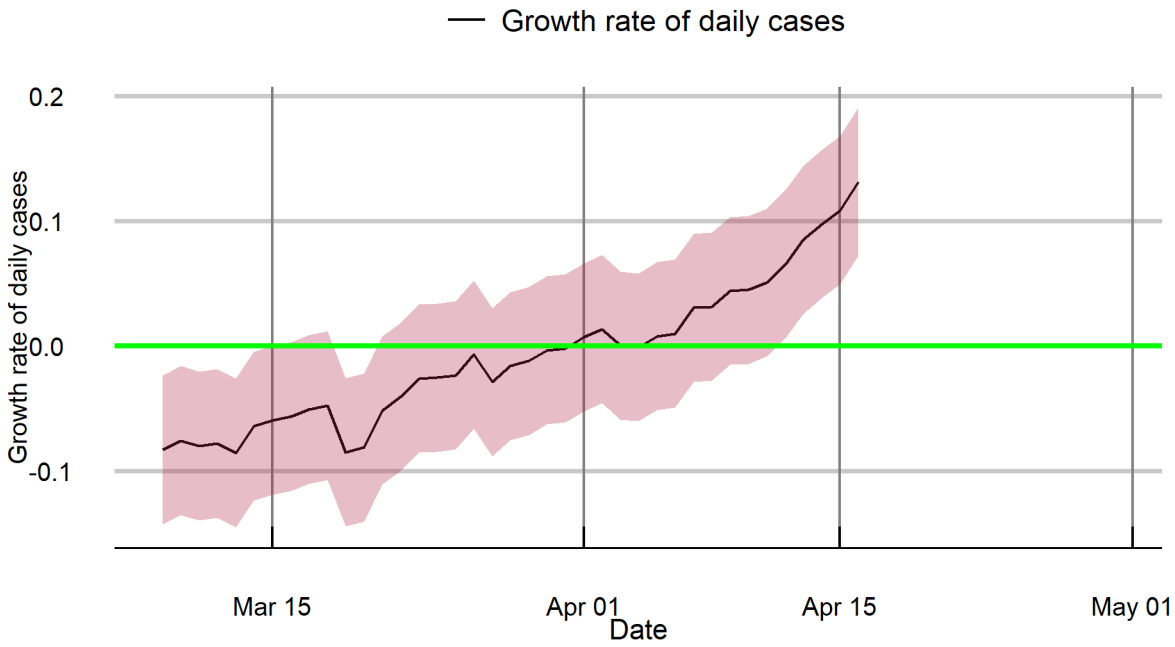


CJBS COVID-19 Tracker for India can be accessed at: www.jbs.cam.ac.uk/covid-india.

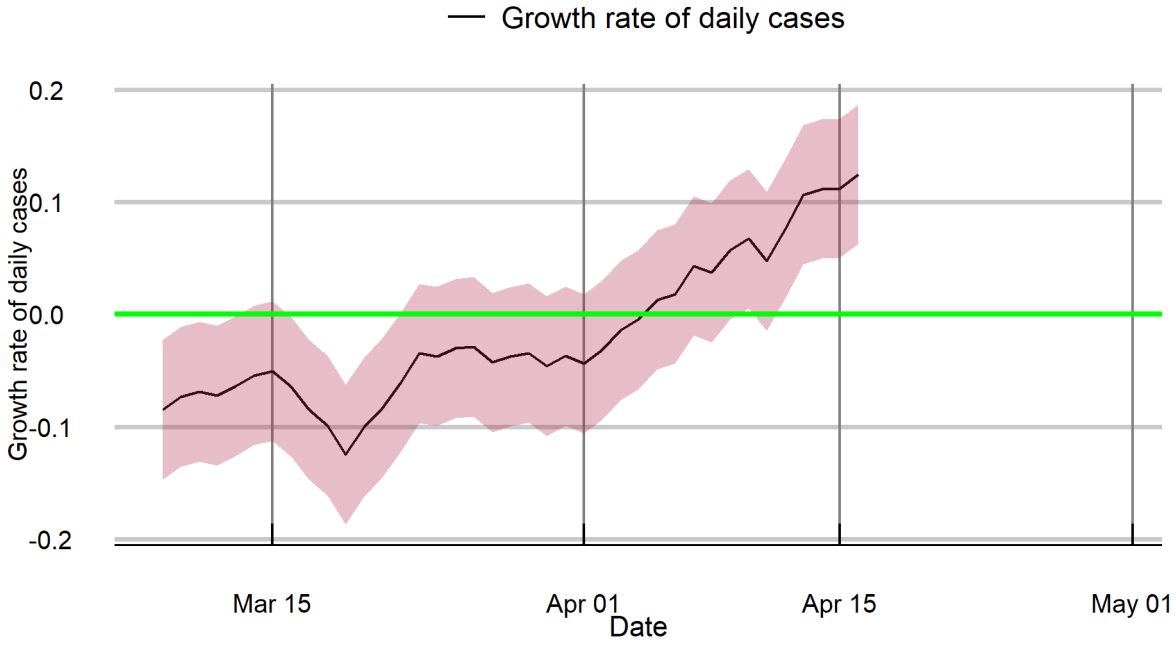
Contact: Paul Kattuman

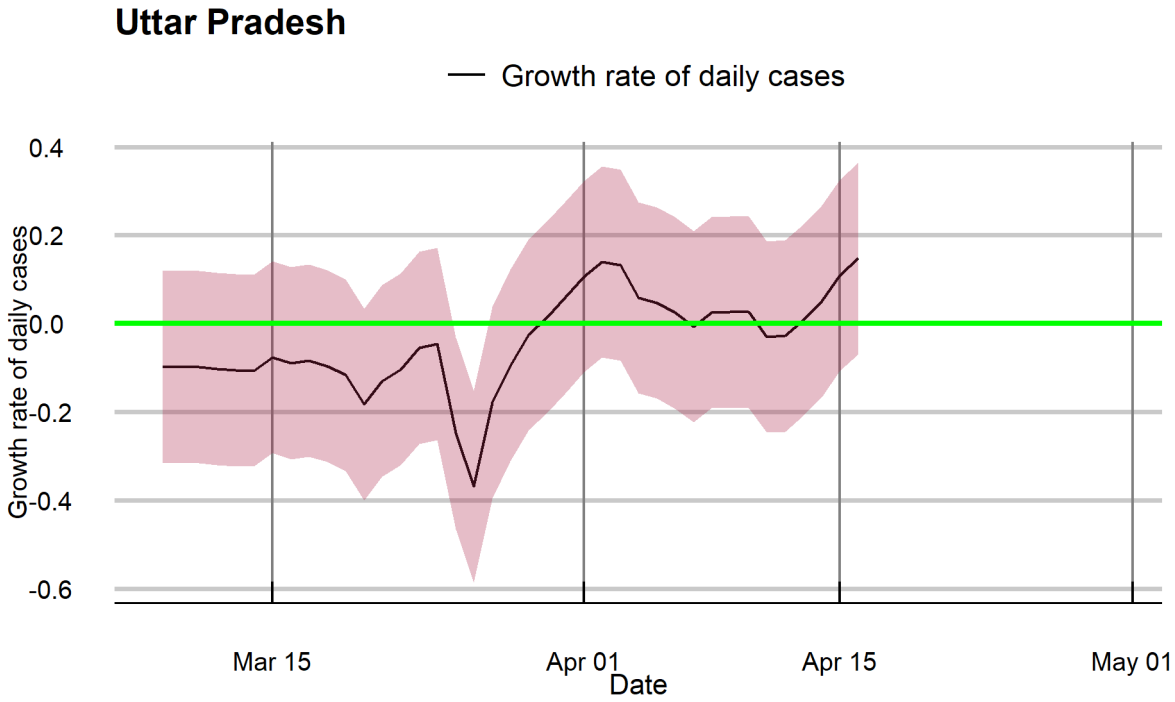
Filtered daily growth rate of COVID-19 cases

Delhi



Haryana




Uttar Pradesh
Growth rate of daily cases
0.4
0.2
0.0
-0.2
-0.4
-0.6
Growth rate of daily cases
Mar 15
Apr 01
Apr 15
May 01
Date

Notes

This tracker was developed by researchers at Cambridge Judge Business School and National Institute of Economic and Social Research, working with Health Systems Transformation Platform in India, as part of a pandemic monitoring series devoted to India and its states and union territories. It provides short term forecasts of the trajectory of the pandemic, identifying states and union territories that are at risk of increases in infection incidence.

Data: COVID-19 confirmed cases and deaths data are sourced from Johns Hopkins University (JHU), Center for Systems Science and Engineering (CSSE).

New cases: growth rate. The filtered trends presented for daily growth rates of cases are estimated using the Kalman filter, applied to the observed series. The method filters out day of the week effects and random noise to reveal the underlying signal. Unlike methods such as the moving average, this method adapts the trend to changes in real time and characterises underlying patterns of surges or attenuations that are hidden in the volatile series. See: Harvey, A. and P. Kattuman (2020). Time series models based on growth curves with applications to forecasting coronavirus. *Harvard Data Science Review*, Special issue 1 - COVID -19. https://hdsr.mitpress.mit.edu/pub/ozgjx0yn/release/2

Note: Accuracy relies on the quality of the published data. Further, changes in government pandemic policies including testing, and changes in transmission relevant social behaviour may lead to actual outcomes that differ from the current projections.

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