

A mixed picture as we closed the week yesterday. New case levels rose yesterday to ~32,000 on strong new case growth in Pennsylvania, California, Illinois, Florida and Texas, on significantly higher tests volumes in all but California., New Cases were flat or declining in 34 States. Hospitalizations declined for a 2nd day in total on large declines again in New York, California, Michigan and New Jersey. New York Hospitalizations have dopped 10% in the last two days. Hospitalizations were flat or declining in 22 States. New Hospitalizations grew materially in Florida, Massachusetts, Georgia and Maryland. There does not appear to be any surge in Hospitalizations over the past week as feared. Mortality rose yesterday to the highest one day level yet at 2,529. 60% of these, or 1,500, in three states (*New York, New Jersey, Massachusetts*). 90% of yesterday's mortality was in 10 states, the rest of the US (*40 States*) had an average Mortality of ~10. Daily recovered/resolved cases yesterday grew to 86% of daily new cases, or ~28,000, as we lapse the high spread rates of 14+ days ago.

Note: Apologies for a few typos in the email summary yesterday in translating #'s to the text!....also, we will not publish tomorrow and will update on Monday.

Let's get to yesterday's #'s:

Headlines:

- New Daily Cases rose to ~32,000 cases.
 - *Material New case growth occurred in 5 states; Pennsylvania, California, Illinois, Florida and Texas,*
 - *22 States had a decline in new cases yesterday, up from 17 states two days ago,*
 - *12 States have ~80% of all US active cases and new cases,*
 - *Remaining 39 states have an average of ~2,500 total reported cases, an average of 175 Current Hospitalized Cases and an average Total Mortality of 133 to date.*
- New Hospitalizations declined again yesterday with Total Current Hospitalizations down for a 2nd day, back to the 12 day downward trend (*see chart below*).
 - ***For a 2nd day, total current hospitalizations dropped yesterday across the US***
 - ***Current Hospitalizations declined in New York by 10% over the past 2 days***
 - *New Hospitalizations grew materially in Florida, Massachusetts, Georgia and Maryland*
- New Mortality grew to the highest level yet yesterday to 2,535.
 - *~1,500 of yesterday's mortality in three states (New York, New Jersey, Massachusetts).*
 - *We expected this rise/surge in Mortality following the peak in new Hospitalizations 10 days ago, but does not make it any easier in any way and it will continue for a few days*
- Total Active US Cases were 499,269 yesterday, total active cases grew 2% yesterday, which is the 5th day in a row of 2% Total Active Case Growth across the US.
- Testing declined ~5,000 to ~154,000 tests, % of tests with positive outcomes was 20% yesterday on slightly lower testing volumes.

- *Changes in Daily New Case volumes/growth are primarily by testing volumes at this stage in the 5 States with the large active case volumes, as testing increases/falls daily, more/less cases are found...*
- *Testing is not changing in any material way as we contemplate relaxing lockdowns in many states and large cities*
- *New rapid testing devices continue to be produced and deployed, but test materials (swabs, reagents, etc) are constraining testing growth.*
- ***It is now being “projected” in the coming weeks that capacity for up to 250,000 tests could be conducted per day in large population states as part of “opening up”.***

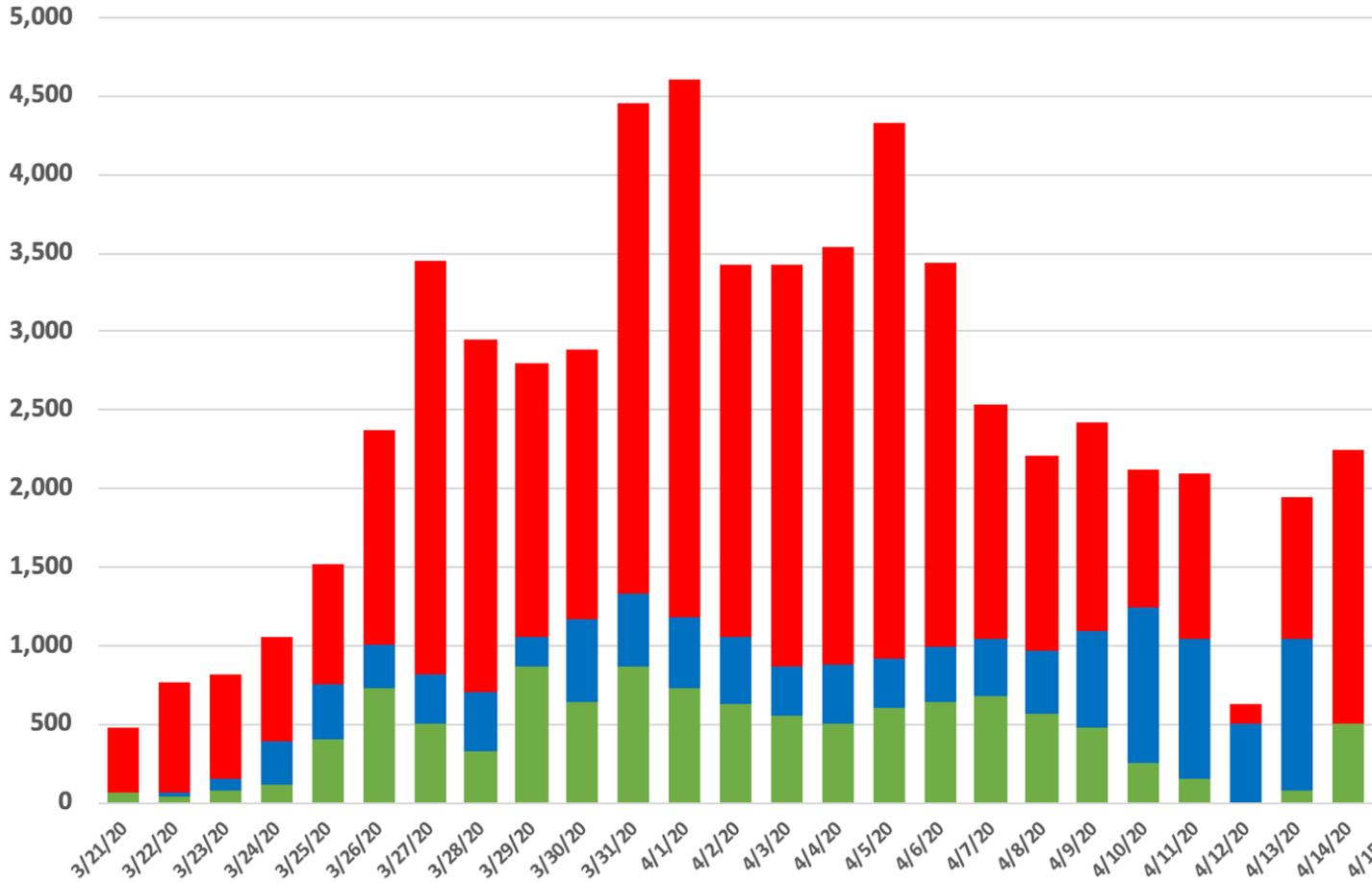
Yesterday's Data:

- Total New US Cases rose to 32,165 cases yesterday, up from 29,567 prior day on significant new case growth in Pennsylvania, California, Illinois, Florida and Texas on higher test volumes there,
 - *22 States had flat or declining New Case volumes yesterday, mostly recovered and recovering states. 29 States had rising New Case volumes,*
 - *15 Recovered States had 1,539 new cases yesterday, all in Pennsylvania and Texas (1,700 cases). Excluding these, recovered states new cases declined from prior day,*
 - *17 Recovering States had a decline of 491 new cases yesterday, all in California (despite much lower testing volumes there), and Virginia. Excluding these, new cases declined from prior day,*
 - *20 Hot Spot States had an increase in new cases of 374, despite a large drop in New Jersey (on lower testing) from prior day. Excluding New Jersey, new cases grew 1,511.*
- Recovered cases grew to 27,629 yesterday, up from 26,252 prior day,
 - *Recovered cases were 86% of all new cases yesterday,*
 - *Total Recovered Cases to date rose to ~274,000, or 39% of Total Identified Cases to date.*
- **Testing volumes declined yesterday by ~5,000 tests at ~154,000,**
 - *Daily New Case volumes are driven directly by testing volumes at this stage in states with large active case volumes,*
 - *% of tests with positive results was flat at 20% yesterday on lower volumes,*
 - *15 States had % Positive Cases on tests performed >20%. 20 states had % Positive at ~10% or lower,*
 - *Pending tests remained flat ~10,000, nearly all in California and Florida,*
 - *3,585,303 tests have been performed in the US to date.*
- **New Hospitalizations declined again as total current hospitalizations declined a 2nd day across the US for those states reporting,**

- *Total current hospitalizations declined for the 2nd time yesterday, there does not appear to be a surge in hospitalizations the last week across the US as #'s are declining day over day,*
- *Total current New York hospitalizations dropped yesterday for the 2nd day to 17,131 from 18,697 two days ago,*
- *Recovered States had 59 new cases to 7,785 current cases,*
- *Recovering States had 14 new cases to 11,450 current cases,*
- *Hot Spot States had 432 new cases, from 772 new cases prior day, at 20,307 current cases yesterday,*
- *Total current hospitalized cases reported yesterday was 56,704, down from 58,432 two days ago.*
- *Mortality rose by ~400 yesterday to 2,535 yesterday from 2,174 prior day,*
 - *3 States had total mortality yesterday of ~1,500; New York, New Jersey, Massachusetts.*
 - *New York had the highest daily mortality yet of 1,025, up ~400 from prior day,*
 - *6 States had total mortality of 1,850 yesterday; New York, New Jersey, Michigan, Massachusetts, Pennsylvania and California*
 - *New Jersey had daily mortality of 322, slightly down from yesterday*
 - *11 States had mortality over 50, remaining 40 states had an average mortality of 10 yesterday.*

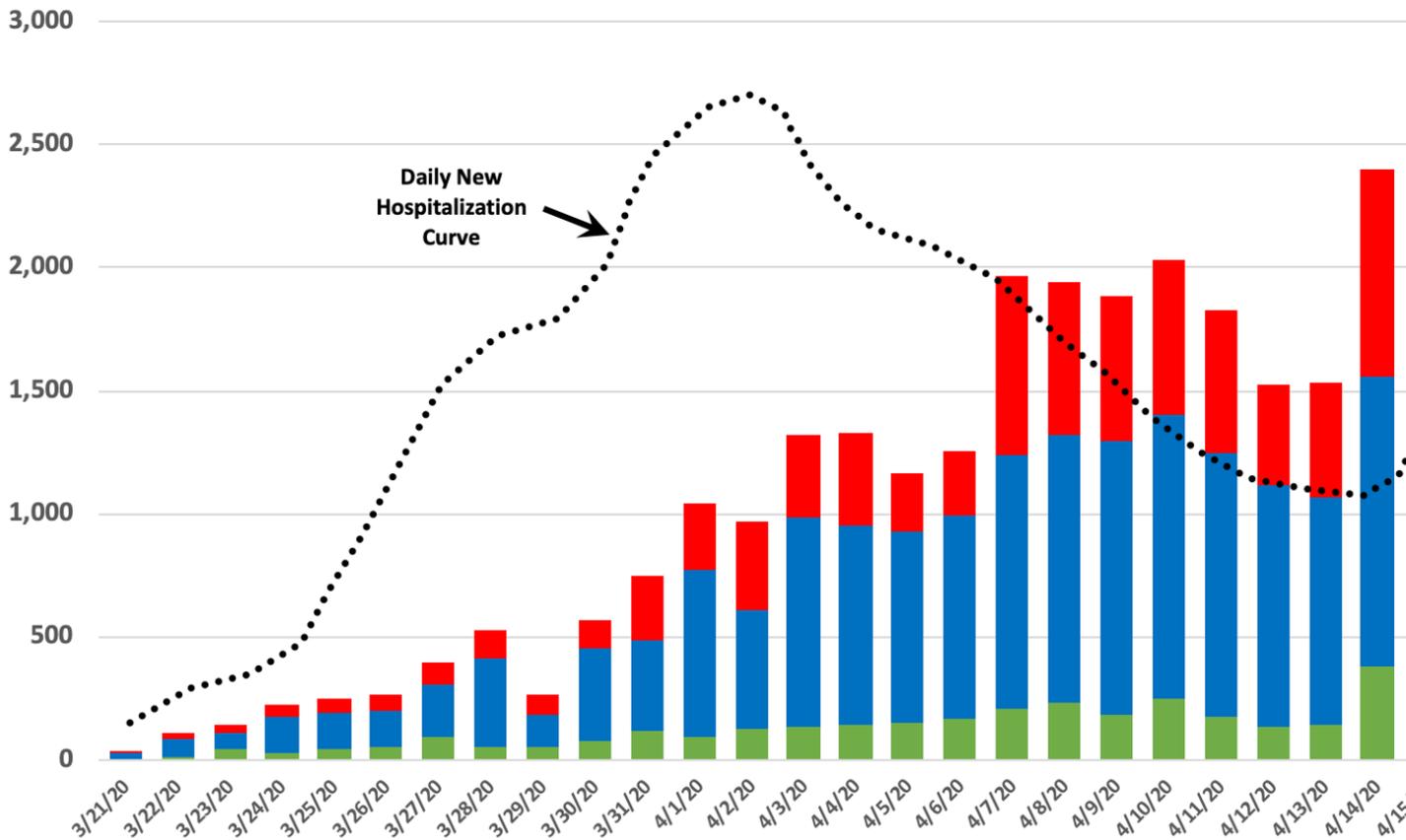
New Daily US Hospitalizations COVID-19

Recovered States Recovering States Hot Spot States



New Daily US Mortality COVID-19

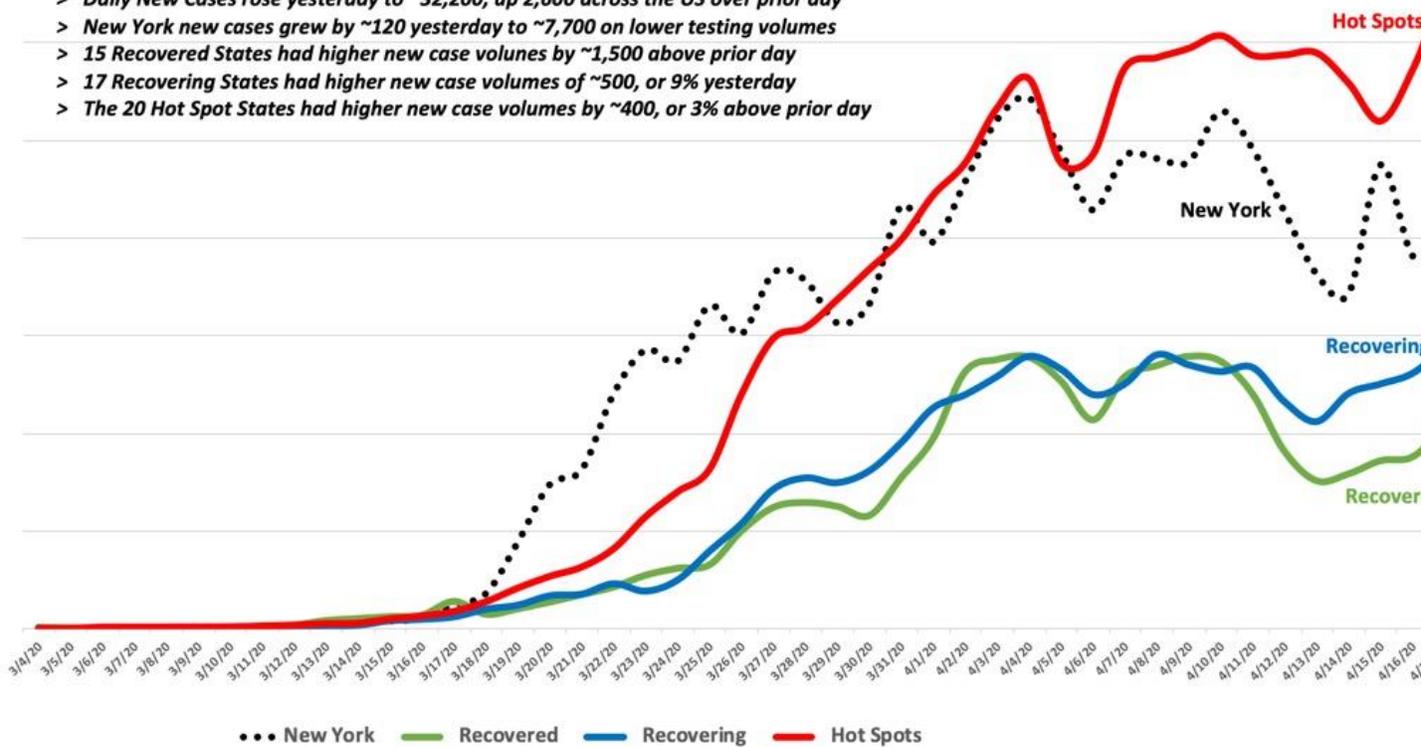
Recovered States Recovering States Hot Spot States



US - Daily New Positive Case Growth COVID-19

Summary

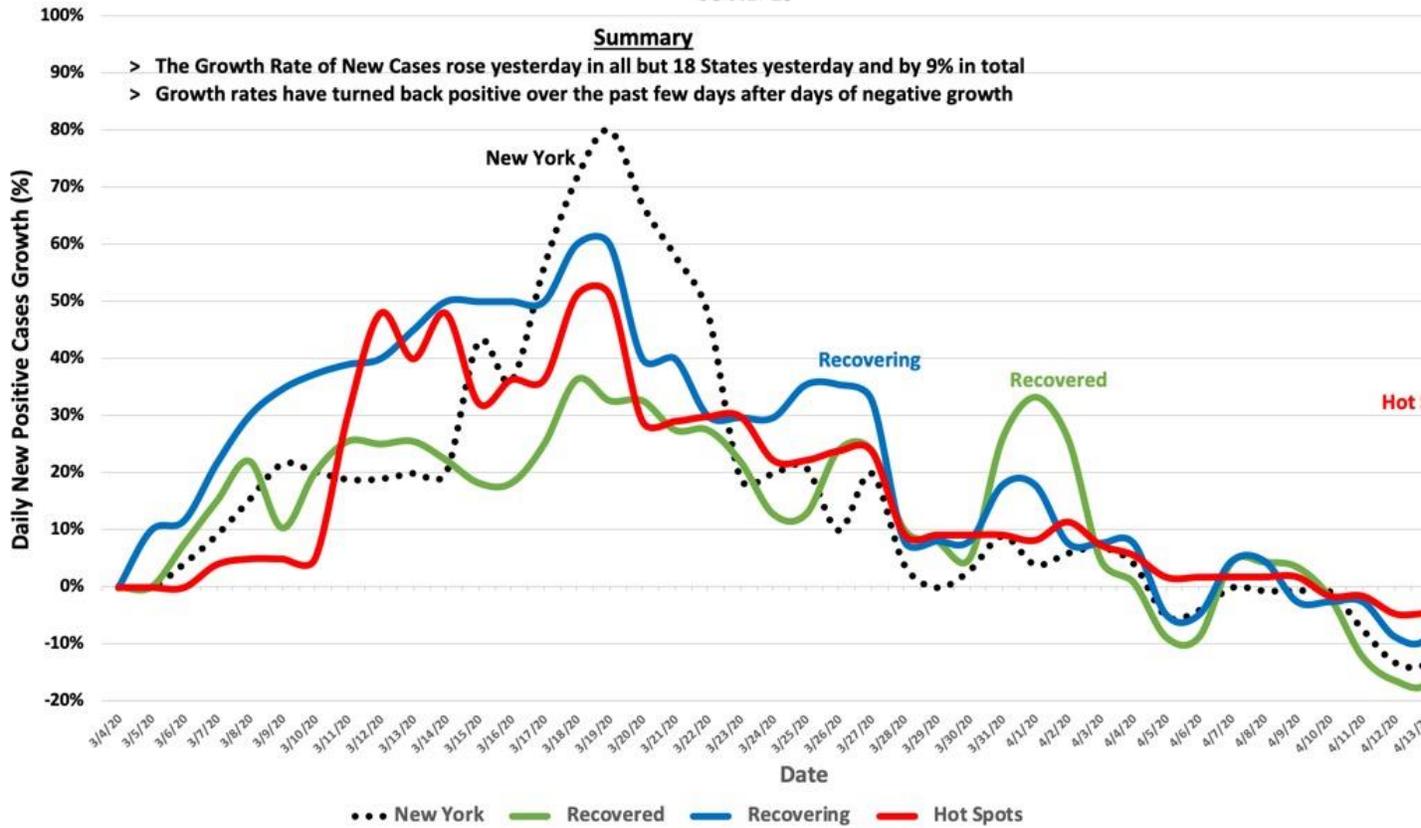
- > Daily New Cases rose yesterday to ~32,200, up 2,600 across the US over prior day
- > New York new cases grew by ~120 yesterday to ~7,700 on lower testing volumes
- > 15 Recovered States had higher new case volumes by ~1,500 above prior day
- > 17 Recovering States had higher new case volumes of ~500, or 9% yesterday
- > The 20 Hot Spot States had higher new case volumes by ~400, or 3% above prior day



••• New York Recovered Recovering Hot Spots

2 Point Smoothing Filter Applied to more clearly indicate growth

Total US - Daily New Positive Case Growth Rate (%)
COVID-19



Recovered States
Washington
Hawaii
West Virginia
Louisiana
South Carolina
Vermont
Idaho
Texas
Kentucky
District of Columbia
Montana
Kansas
Utah
Wisconsin
Pennsylvania
<i>7 or more days with <u>negative</u> Daily New Case Growth Rate</i>
<i>Low/No New Hospitalizations Low/No New Mortality</i>

Recovering States
Mississippi
Michigan
New York
Wyoming
Virginia
Alaska
Indiana
Maryland
California
Arizona
Iowa
New Hampshire
New Mexico
Ohio
Oregon
Oklahoma
<i>4 days with <u>negative</u> Daily New Case Growth Rate</i>
<i>Declining New Hospitalizations Declining New Mortality</i>

Hot Spot States
Illinois
New Jersey
Georgia
Florida
Massachusetts
Minnesota
Alabama
Nevada
North Carolina
Rhode Island
Tennessee
Delaware
Connecticut
Colorado
Missouri
Nebraska
North Dakota
South Dakota
Maine
Arkansas
<i>Continued Positive Daily New Case Growth Rate Rising Hospitalization</i>