

Some encouraging trends as we start yet another week. Hospitalizations continued to decline over the weekend. **Total active cases in the US also declined for the 1<sup>st</sup> time yesterday**. Total recovered/resolved cases are now ~400,000, or 44% of the US Total US cases identified to date. New hospitalizations are now negative for three days and this continues what is now a 14 day trend of declining new hospitalizations, resulting in **four days of drops in total hospitalizations** across the US (*see chart below*). Mortality has also declined significantly over the last two days and was down 40% yesterday from the Friday high. **Total New Cases across the US also declined yesterday to the lowest level in 19 days (~25,000)** on slightly higher tests volumes (~160,000), bringing % positive tests down to 17%. This would suggest that the drops we had hoped for after two weeks of lockdowns are now taking hold at the 4 week mark. This should be the story of this coming week until we reach a base level of daily new cases, total hospitalization and mortality.

We are also now lapsing 16+ days since the highest daily new case counts, resulting in the largest daily recovered case numbers yet (*reported and unreported*) at more than 30,000 for the last two days. For the last two days **daily recovered/resolved cases have exceeded new cases**, at ~120%.

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

**Headlines:**

- New Daily Cases declined to ~25,000 cases.
  - *New Case Growth was negative yesterday and -20% from Friday in total on higher testing volumes the last two days,*
  - *New case growth was negative in 33 states yesterday, including New York. New Jersey had higher new case volumes yesterday,*
  - *Material New case growth occurred in 5 states; New Jersey, Ohio, Iowa, Tennessee, Mississippi,*
  - *12 States have ~80% of all US active cases and new cases,*
  - *Remaining 39 states have an average of ~2,500 total reported cases, fewer than 500 current Hospitalized Cases and an average Total Mortality of 147 to date.*
- New Hospitalizations declined again yesterday with Total Current Hospitalizations down for a 4<sup>th</sup> day. We have now had a 14 day downward trend (*see chart below*).
  - ***For a 4<sup>th</sup> day, total current hospitalizations dropped yesterday across the US***
  - ***Current Hospitalizations declined in New York by 5% over the past 2 days and are at the lowest level since the outbreak began***
  - *New Hospitalizations grew materially in only two states yesterday; Texas and Maryland*
- New Mortality declined materially over the weekend, **dropping 40% to 1,539 yesterday** from 2,535 on Friday.
  - *~1,000 of yesterday's mortality in four states (New York, New Jersey, Massachusetts, Pennsylvania).*

- *Remaining 47 states had an average mortality yesterday of 10, 25 states of 5 or less,*
- *It would appear that mortality is now beginning to follow the declining trend in Hospitalizations over the past two weeks and we should look for continued lower #'s daily.*
- Total Active US Cases were ~500,000 yesterday, **total active cases declined for the 1<sup>st</sup> time** by 1% yesterday.
- Testing rose ~10,000 to ~158,000 tests, % of tests with positive outcomes was lower at 17% yesterday on slightly higher testing volumes.
  - *Testing is not changing in any material way yet 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”.*

**Net-Net: # of New Cases declined across all groups – New Case growth rates are now negative again across the US – Hospitalizations are continuing to decline followed by daily Mortality – Testing remains flat**

*(see charts below)*

#### **Yesterday's Data:**

- Total New US Cases declined to 25,052 cases yesterday, down from 32,165 on Friday.
  - *33 States had flat or declining New Case volumes yesterday, mostly recovered and recovering states.*
  - *15 Recovered States had a decline in new cases of -1,911, or -39% growth from prior day.*
  - *17 Recovering States had a decline of -706 new cases yesterday, or -12%,*
  - *20 Hot Spot States had a decline in new cases of -499, or -5%*
- Recovered cases grew to 30,802 yesterday, or 123% of New Cases
  - *Recovered cases were 123% of all new cases yesterday,*
  - *Total Recovered Cases to date rose to ~400,000, or 47% of Total Identified Cases to date.*
- **Testing volumes rose yesterday by ~10,000 tests at ~158,000,**
  - *Daily New Case volumes declined on higher testing yesterday,*
  - *% of tests with positive results was declined to 17% yesterday on higher volumes,*
  - *15 States had % Positive Cases on tests performed >20%. 20 states had % Positive at ~10% or lower,*
  - *Pending tests declined to ~3,000,*

- 3,884,925 tests have been performed in the US to date.
- **New Hospitalizations declined again as total current hospitalizations declined a 4<sup>TH</sup> day across the US for those states reporting,**
  - Total current hospitalizations declined for the 4<sup>TH</sup> time yesterday, there does not appear to be a surge in hospitalizations in any way as #'s have been declining day over day,
  - Total current New York hospitalizations dropped yesterday to lowest level yet since the outbreak began at 16,213 from 18,697 four days ago,
- Mortality declined by ~300 yesterday to 1,539 yesterday, down from 2,535 on Friday,
  - ~1,000 of yesterday's mortality in four states (New York, New Jersey, Massachusetts, Pennsylvania).
  - New York had lower daily mortality of 627, down from 1,025 Friday,
  - New Jersey had daily mortality of 132, down from 322 on Friday,
  - Only 5 States had mortality over 50 , remaining 46 states had an average mortality of 9 yesterday.

A more positive picture as we look at yesterday's #'s. New Cases, Hospitalizations and Mortality all declined from prior day. New hospitalizations hit another low and for the 1<sup>st</sup> time total current hospitalizations across the US declined from prior day. Mortality came down from highs earlier this week as well. Daily recovered/resolved cases yesterday grew to 89% of daily new cases as we begin to lapse the high spread rates of 14+ days ago. New cases in New York, New Jersey and Massachusetts represented ~50% of total new US cases yesterday (*more on this next*). We will see more mortality, but this should begin a decline in the coming days.

As we look forward and entertain concerns and fears on relaxing the lockdown and quarantine mandates in many places across the US, it is helpful to get an overview of where we are with nearly two months of outbreak tracking in the US. For some, depending on where we live and work, this may raise concerns, for others this should balance concerns/fears. Two months into the spread and efforts to control this virus, it is a tale of ONE metropolitan area and 10 states with higher populations densities and the larger populations centers.

- **~50% of All US Cases, Hospitalizations, Mortality and the highest % Positive tests outcomes are in one 90Mile x 90Mile area of the US -the NYC-Jersey City Metropolitan Area**
- **~40% of ALL REMAINING US Cases, Hospitalizations, Mortality are in 10 States with more than 10,0000 active cases, that are the higher population density states with the other high-density metro areas**

#### **New York City – Jersey City Metro Area**

- 50% of Total US Cases to date
- 50% Average % Positive test outcomes over the past 7 days
- 70% of all US Hospitalizations to date
- 60% of all US Mortality to date

#### **Ten High Population Density States – Large Metro Areas**

- 30% of Total US Cases to date, ~25,000 per State

- 20% Average % Positive test outcomes over the past 7 days
- 20% of all US Hospitalizations to date
- 30% of all US Mortality to date

#### Remaining US

- 20% of Total US Cases to date, ~3,000 per State
- 10% Average % Positive test outcomes over the past 7 days
- 10% of all US Hospitalizations to date
- 10% of all US Mortality to date

The net of this for all of us is the large, high-density metro areas have been the areas of greatest spread, highest rates of infection and the largest burden on hospitals and medical workers. With the high rates of Positive Tests, these are also the areas of highest remaining infection after weeks of shutdown due to the high population density and contact. This is understandable and was likely unavoidable. This also should inform us on the risks and required actions to “open-up”. For most of the US, most states and most people, we can control this with responsible and prudent action. In the large metro areas we have a more complicated challenge.....we MUST have a significant increase in testing capacity in the metro areas if we are to manage this in any reasonable way for all that live in these areas (*NYC, Chicago, Boston, Philadelphia, Miami, San Fransico, DC, LA, Detroit, Tampa*)

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

##### **Headlines:**

- New Daily Cases declined slightly to ~29,000 cases.
  - *Material New case growth occurred in 5 states, New Jersey, California, Massachusetts, Georgia, Connecticut,*
  - *21 States had a decline in new cases yesterday, up from 17 prior day*
  - *2 States have ~45% of all US active cases and new cases; New York and New Jersey (NYC-Jersey City Metropolitan Area).*
  - *10 States have ~50% of remaining cases in the US; Michigan, Massachusetts, Pennsylvania, California, Illinois, Louisiana, Florida, Georgia, Texas, Connecticut.*
- New Hospitalizations declined a 2<sup>nd</sup> day by ~800 cases yesterday to 313 for states reporting, back to the 11 day downward trend (*see chart below*).
  - ***For the 1<sup>st</sup> time, total current hospitalizations dropped yesterday across the US***
- New Mortality declined yesterday by ~300 to 2,174 and down from record highs (*see chart below*)
  - *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,*
- Total Active US Cases were 491,003 yesterday, total active cases declined 2% from prior day. Recovered/Resolved cases were 89% of new cases yesterday
- Testing rose ~17,000 to ~160,000 tests, % of tests with positive outcomes was 20% yesterday on slightly higher testing volumes.

- *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.*

### **Yesterday's Data:**

- Total New US Cases declined to 29,567 cases yesterday, down from 30,206 prior day on significant new case growth in New Jersey and lower new cases in New York,
  - *New York/New Jersey continue to find new cases driven by daily test volumes as both states have constant % positive outcomes above 45%, regardless of test volumes daily,*
  - *21 States had declining New Case volumes yesterday, mostly recovered and recovering states. 30 States had rising New Case volumes.*
  - *15 Recovered States had 3,360 new cases yesterday, down 330 cases from the prior day,*
  - *17 Recovering States had 5,505 new cases yesterday, up 550 cases from the prior day,*
  - *20 Hot Spot States had 12,914 new cases yesterday, up more than 3,000 or 30% from prior day, led by New Jersey.*
- Recovered cases grew to 26,252 yesterday, up from 24,217 prior day,
  - *Recovered cases were 89% of all new cases yesterday,*
  - *Total Recovered Cases to date rose to ~246,000, or 36% of Total Identified Cases to date.*
- **Testing volumes rose yesterday by ~18,000 tests at ~160,000,**
  - *Testing grew by > than 1,000 tests in 11 states, led by New Jersey. New Jersey had 55% positive outcomes on higher test volumes*
  - *% of tests with positive results was flat at 2% yesterday on higher volumes*
  - *Pending tests declined by ~6,000 to ~10,000, nearly all in California and Florida.*
  - *3,431,215 tests have been performed in the US to date*
- **New Hospitalizations declined yesterday for the 2<sup>nd</sup> day by ~800 cases to a low of 313 new cases across the US for those states reporting,**
  - *Total current hospitalizations declined for the 1<sup>st</sup> time yesterday by ~600 cases across the US*
  - *Total current New York hospitalizations dropped yesterday for the 1<sup>st</sup> time to 17,723 from 18,697 prior day ,*
  - *Recovered States had 126 new cases to 7,855 current cases,*
  - *Recovering States cases declined for a 2<sup>nd</sup> day by 585 cases to 329,480 current cases,*
  - *Hot Spot States had 772 new cases, down sharply from 1,744 new cases prior day at 20,335 current cases yesterday,*

- *Total current hospitalized cases reported yesterday was 57,679, down from 58,432 prior day.*
- *Mortality dropped by more than 300 yesterday to 2,174 yesterday from 2,482 prior day,*
  - *6 States had mortality above 100 yesterday, reporting 1,504 deaths yesterday; New York, New Jersey, Michigan, Massachusetts, Illinois , Connecticut*
  - *New York had the highest daily mortality of 606, down ~150 from prior day,*
  - *New Jersey had daily mortality of 362, the highest level yet,*
  - *6 States had mortality over 100 cases yesterday, 4 states over 50, All remaining states had an average mortality of 11 yesterday.*

**NOTES:**

15 Recovered States = 7+ Days of Negative Daily New Case Growth – Low/No New Hospitalizations - Low/No New Mortality

17 Recovering States = 4 Days of Negative Daily New Case Growth - Declining New Hospitalizations - New Declining Mortality

20 Hot Spots States = Positive Daily New Case Growth Rates - Rising New Hospitalizations/Mortality