

A brief update today and a note on Data below as some good points raised by this group as we see improving trends and recoveries overall.

New case volumes rose slightly yesterday along with Mortality, while new Hospitalizations remained flat from prior day in total. Most new case growth was in Recovering and Hot Spot states (*Charts below*). New York had the lowest New Case volume in 30 days, but on much reduced testing yesterday. Testing declined yesterday by ~13,000 to ~145,000 across the US. 70% of New Cases yesterday were in 10 states and ~30% of all New Cases daily continue to be in New York and New Jersey. New York and New Jersey had ~50% of yesterdays total mortality. While New York continues to recover, New Jersey continues to see a rising trend.

As some of this group has noted, data reporting is not consistent daily across all states. Hospitalization data lags the most and in states with the highest case loads as they grapple with the outbreak. As a result, we use three day moving averages on most data in our Charting and filter data spikes so we can see the trends. The trends are what matter at this stage as New Cases on a daily basis are closely correlated with daily testing volumes. Over a three to four day period, the data elements are more consistent and reliable.

Recovered Cases: Most sources report Total Cases to date in the US (*the media*), despite the outbreak being 60 days old and a known mortality of ~45,000 to date. Sources that do report “Active Cases” derive this number from reducing Total Cases by recovered/resolved Hospital Cases/Mortality **only**. These do not include the non-hospitalized tested and recovered cases. What is clear is the virus resolves in ~14 days for cases without complications (*hospitalizations*) for those that are symptomatic and non-symptomatic. This means that both tested and untested cases resolve over time and this is our best recovery strategy and the strongest impact of the lockdowns and quarantine. Three weeks ago there were ~200,000 Total Tested Cases to date in the US, 2 Weeks ago there were ~400,000 Total Tested Cases to date in the US. We can be sure that nearly **ALL** of these cases, along with the countless untested cases at that time are now resolved.

Active Cases: We update reported Active Cases to account for Daily Mortality + Reported Hospitalized Recovered + 80% of New Cases 15 Days Ago. This provides a rational estimate of the total number of recovered cases. We take a slightly more conservative approach in updating Daily Active Cases, so there is a gap/lag in our Total Recovered Cases estimate and Daily Total Active Cases reported. The Charts we provide every day are based on *Reported New Cases, Growth Rate in Reported New Cases, Reported Hospitalizations and Reported Mortality*. **There are only a few numbers that should matter: New Cases every day, Active Cases every day, Current Hospitalizations and Daily Mortality. When these go to zero or near zero, we will have succeeded. Total Cases to Date (as reported in the media) will always be large, and will never be zero.**

(Going forward we report the more conservative Recovered Case estimates as Total Tested Cases – Total Active Cases, to reduce and inconsistencies or confusion)

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

Headlines:

- New Daily Cases rose to ~27,600 cases yesterday, up slightly from prior day,
 - *New York and New Jersey had a combined 8,384 New Cases Yesterday,*
 - *7 States had New Case growth of more than 1,000 cases yesterday, led by; California, Connecticut, Massachusetts, Ohio and Georgia,*
 - *New case growth was negative in 30 states yesterday,*
 - *14 States have ~80% of all US active cases and new cases,*
 - *Remaining 36 states have an average of ~150 new cases reported yesterday*
- New Hospitalizations rose slightly yesterday to ~250 new cases in total, after several days of declines. We continue the 15 day trend of declining hospitalizations across the US.
 - *Hospitalizations grew materially in 5 States: Indiana, Georgia, Florida, Maryland, Delaware and Ohio*
 - ***Current Hospitalizations in New York and New Jersey remained relatively flat from prior day***
- New Mortality grew yesterday to 1,939 from 1,539 prior day, down from 2,535 last Friday.
 - *~1,400 of yesterday's mortality was in 7 states (New York, New Jersey, Massachusetts, Pennsylvania, Connecticut, Maryland, Georgia).*
 - *Remaining 44 states had an average mortality yesterday of 12, 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 trend.*
- Total Active US Cases were ~507,000 yesterday, **total active cases grew** by 1.5% yesterday.
- Testing declined by ~14,000 to ~145,000 tests, % of tests with positive outcomes remained at 17% yesterday on lower 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) and lab capacity 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".*
- **Recovered Cases yesterday were ~23,000 or 83% of new cases – Total Recovered Cases to date were ~285,000, or 36% of Total Cases to Date yesterday**