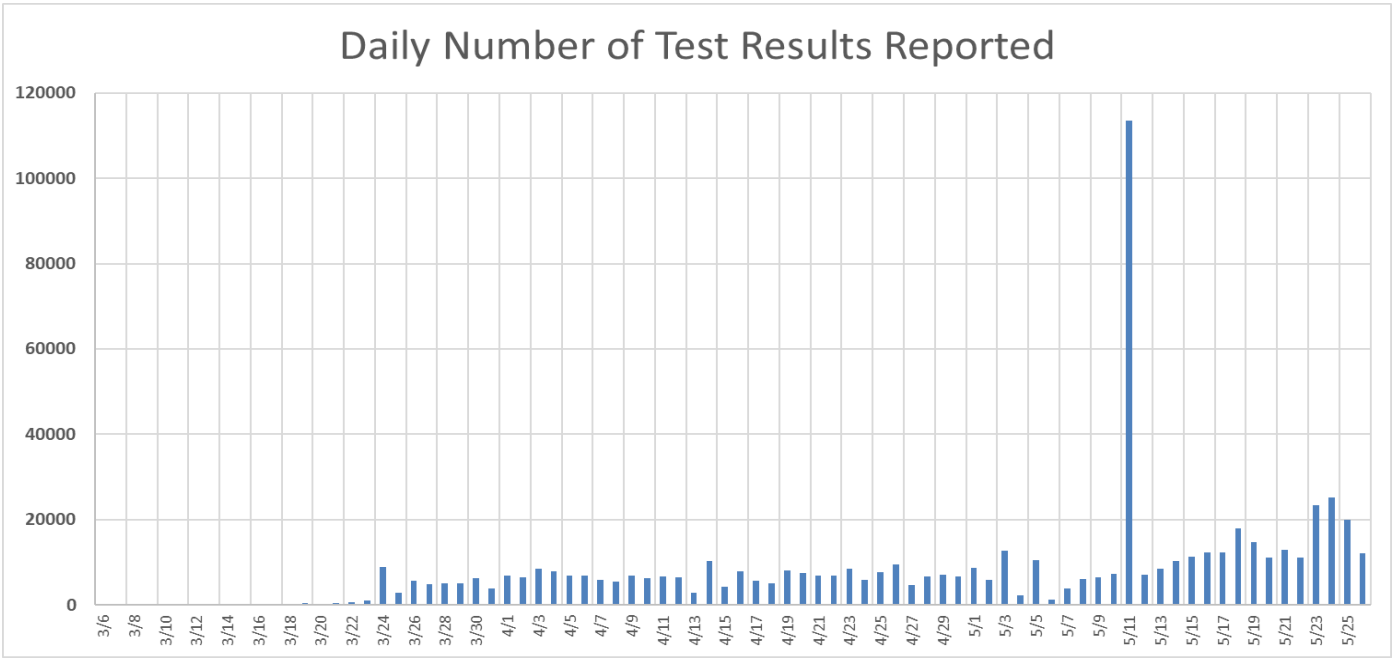
NJ Positive vs Negative Tests

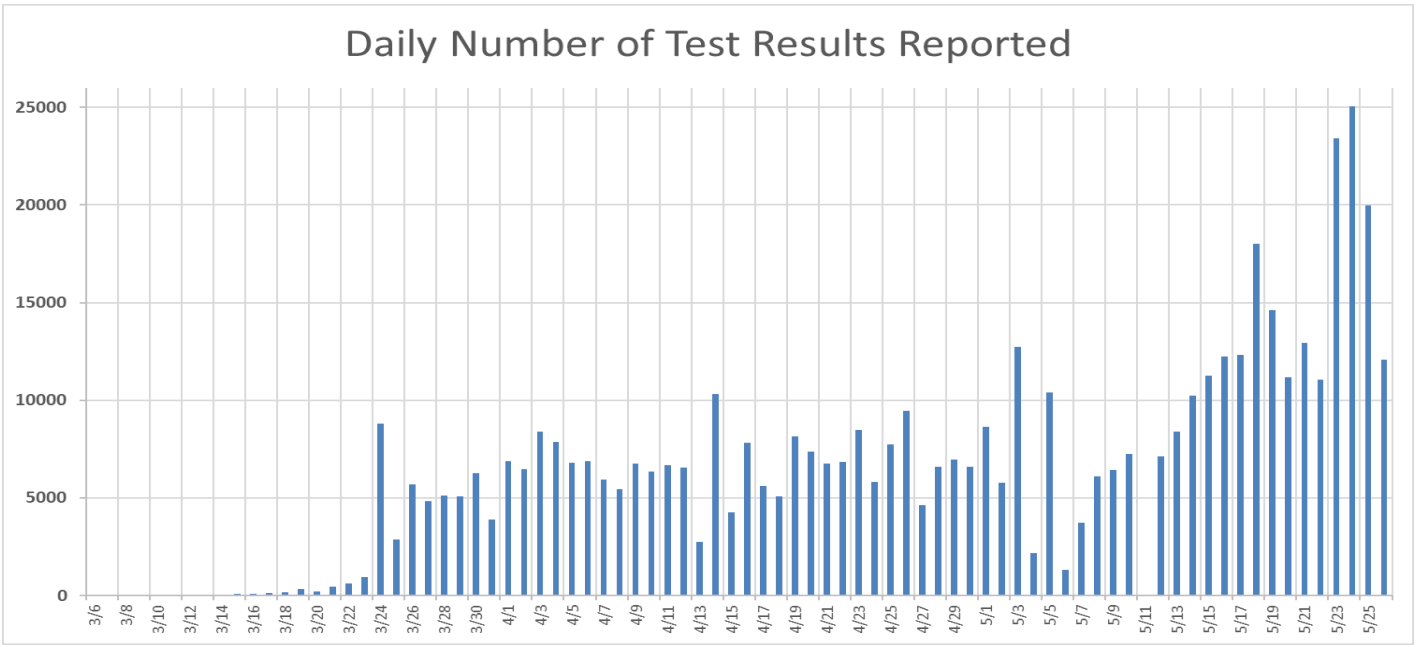
Getting accurate numbers has been a challenge in this pandemic. I covered this to some degree on May 22nd. I have to thank my new, very smart, friend Mike Roe for finding this data.

Here we will look at the total number of tests performed, separating out the number of positive and negatives. This is important because when you see the number of positives change there are several factors that can contribute. More testing and spread of the disease can make the positive cases go up. Testing asymptomatic people can make the numbers go down. Knowing the number of tests can help you adjust. But with everything else with this crisis, it's not that easy.

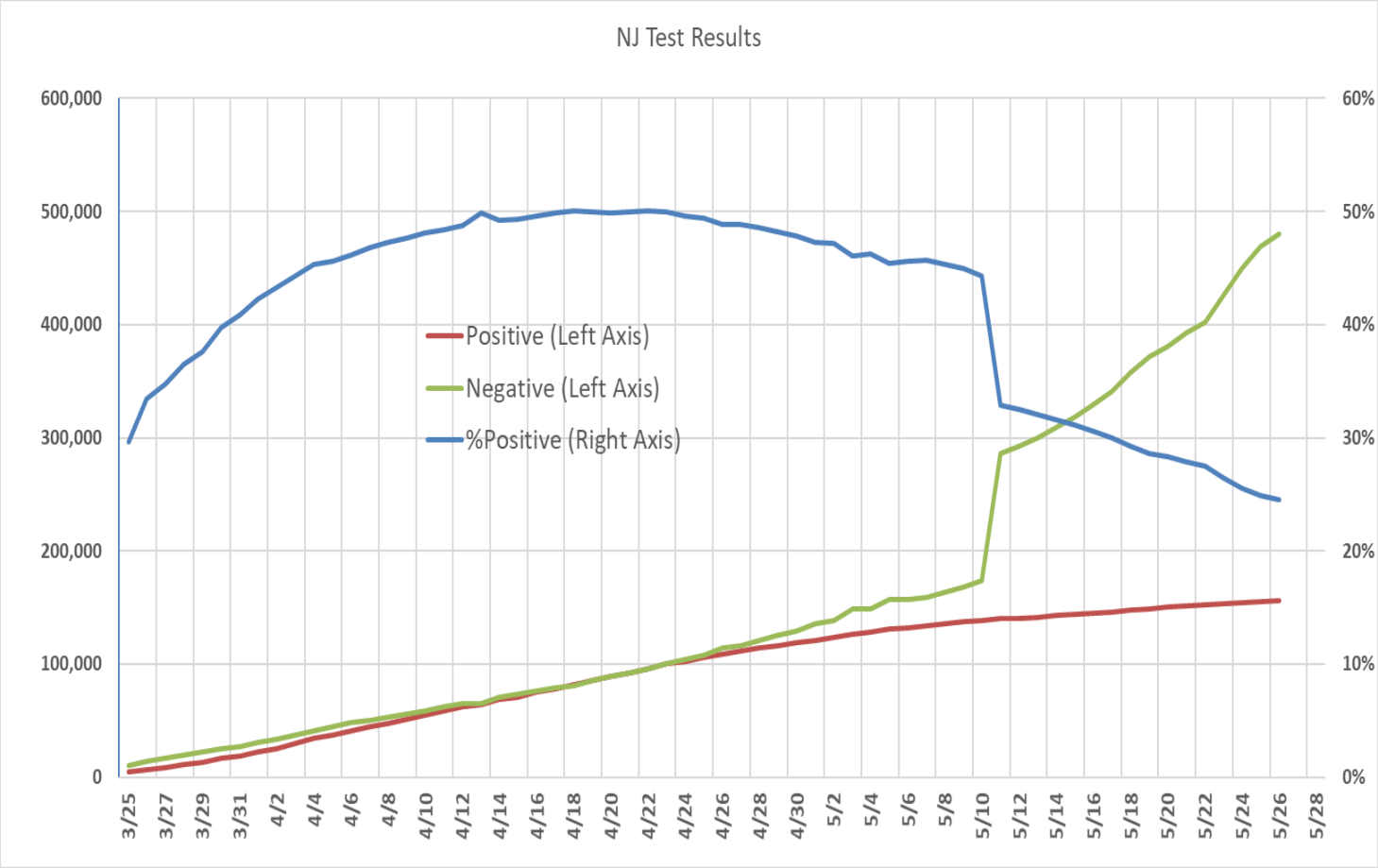
First, we will look at the number of tests reported each day.



You can see on May 11th there was a sudden spike in **reported** cases. We will see below, that although the number of tests spiked, the number of positive tests that day did not. This indicates to me this is a reporting artifact. Likely because some labs were reporting only positve tests to the state until May 11th and caught up with their negative reports that day. For a better look I'll cut off the y-axis at 26000 and leave out Mat 11th.



Now you'll understand the next graph. I show three curves. The green line is the number of negative tests and you see it jumps on May 11th. The number of positive tests is the red line which you can see doesn't jump and is leveling off despite the increase in the number of tests. Finally, the blue line (look at the right vertical axis for the values) is the percentage of positive tests. You'll see the jump down as the number of negative tests is added.



We can see the percentage of positives is dropping. This is likely due to two reasons. We are getting ahead of the virus and because we are now testing asymptomatic people.

It would be nice to look at the number of symptomatic people and the number of asymptomatic people tested per day. Then we want to know the number of positives for each group. We don't get that information. Also, because the time between a person being tested and the time we get the result varies, we can't match up the number of tests with the number of positive tests on a daily basis.

This is unfortunate. I hope in the future this can be sorted out so we can learn how well mitigation worked.

For the reasons above I have to agree with the Governor, the best way to follow this is by hospital admissions and discharges. Those numbers are moving in the right direction.

For now the take away number, for what it's worth, is the positivity rate is dropping. It is now at about 25%.