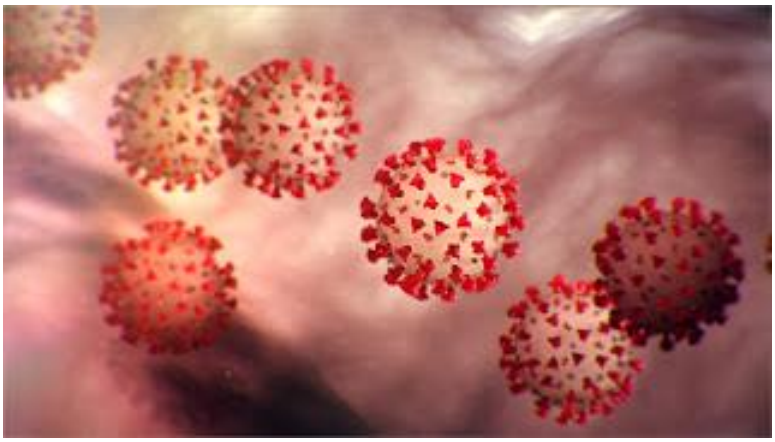


WEEKLY NEW JERSEY

23 JANUARY 2021

NEW JERSEY COVID ACTIONS

TERRENCE P MCGARTY
TGL COVID 001

Contents

1 INTRODUCTION

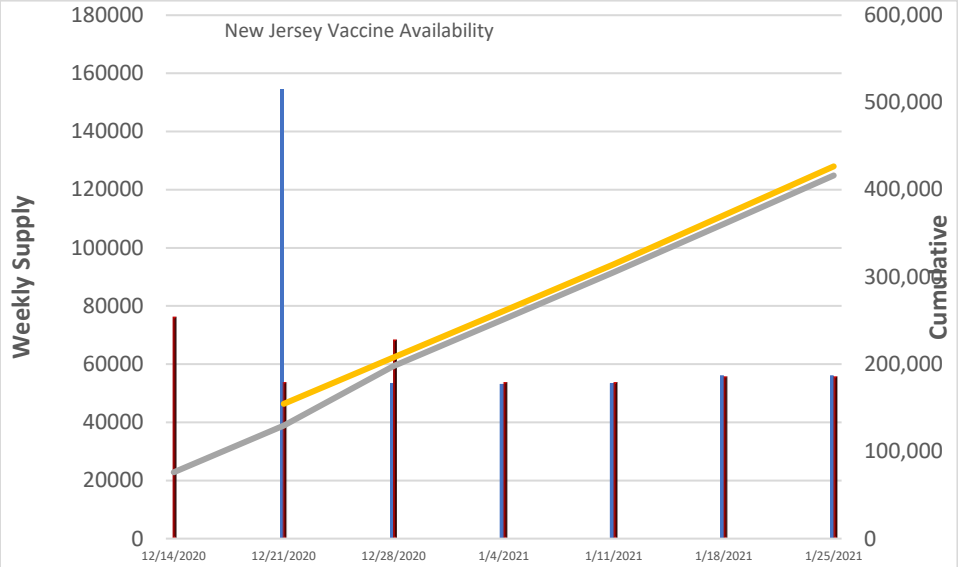
After almost a year of tracking the pandemic we have entered into a stage where vaccines are available. The development of vaccines was a monumental task with great success. The challenge with vaccines is twofold. First scale of the production. Second distribution and application. Both at this time are evident. The Federal Government under the previous administration did a great job in getting the vaccine. It did a horrendous job and getting it where needed. I have compared it to General Groves and the atomic bomb. It was as if Groves developed the bomb with his resources than shipped it to San Francisco waiting for the Japanese to pick it up and drop it. In our case in a sense the Governors were the enemy. In many ways many remain so. There is no public health system and what is called public health are all too often political cronies with grossly incompetent resources.

Our approach in these weekly reports is to memorialize the progress, hopefully, of restraining the pandemic and remediating it. The challenge is significant sine the virus is mutating at a phenomenal rate. Distribution of the vaccine is going to the wrong people, namely health younger people like prisoners and smokers, and not to the critical immunocompromised sources of rapid mutation. State Government are so grossly deficient and politically corrupt that history will look upon many as we do when Nero let Rome burn.

This will be the first of a somewhat period set of reports. It details the vaccines fiasco, demographics and infections/mortality. Our intent is to chronicle the attempts to remediate the virus. The data used is from public sources but we have found that it is often highly corrupted data in time and specificity.

2 VACCINES

Let's first start with NJ vaccine availability. It is shown below. Now apparently Pfizer has announced a refusal to meet prior commitments so perhaps we may see a nationalizing of the company, but possibly. Total supply is about 950,000. The weekly stats are shown below.



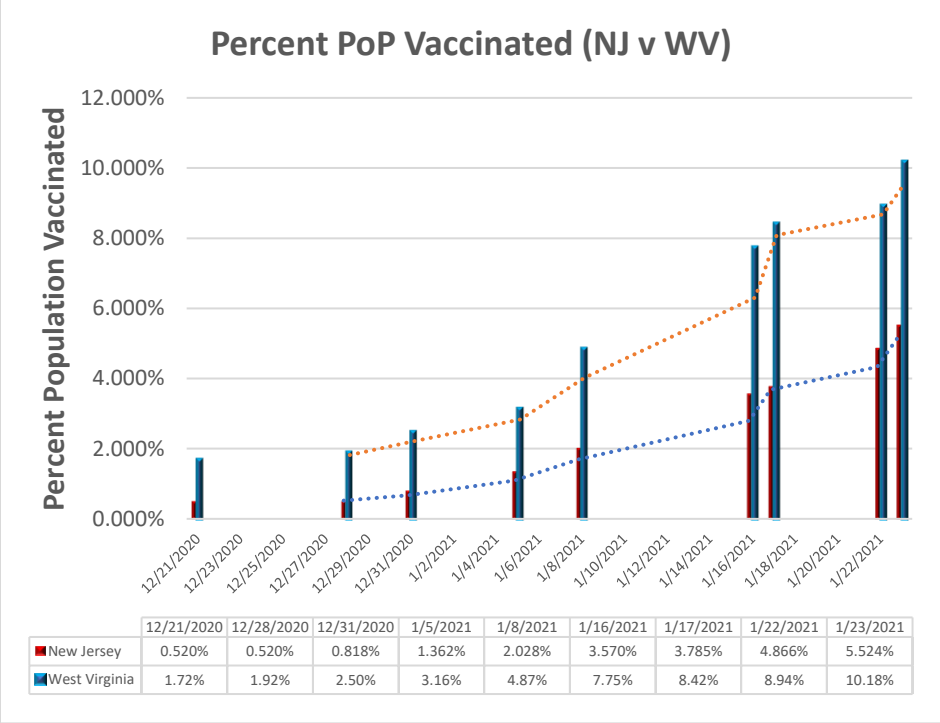
	12/14/2020	12/14/2020	12/21/2020	12/21/2020	12/28/2020	12/28/2020	1/4/2021	1/4/2021	1/11/2021	1/11/2021	1/18/2021	1/18/2021	1/25/2021	1/25/2021
Moderna			154,500	154,500	53,400	53,400	53,200	53,200	53,400	53,400	56,100	56,100	56,100	56,100
Pfizer	76,050	76,050	53,625	53,625	68,250	68,250	53,625	53,625	53,625	53,625	55,575	55,575	55,575	55,575
Pfizer Cum	76,050	76,050	129,675	129,675	197,925	197,925	251,550	251,550	305,175	305,175	360,750	360,750	416,325	416,325
Moderna Cum			154,500	154,500	207,900	207,900	261,100	261,100	314,500	314,500	370,600	370,600	426,700	426,700

What we have no knowledge of is the forward looking supplies. It is suspected that there is no plan that delineates that number. Distribution is pro rate per state population.

The two manufacturers of the mRNA vaccines have through the Feds been delivering about 110,000 per week. If we assume NJ is 9 million people, that is 18 million doses or 180 weeks! By that time mutations will have created a massive number of new viruses.

3 VACCINE PROGRESS

The chart below compares NJ and West Virginia. NJ is half of WV but in NJ they are getting to the murderers, arsonists, thieves, smokers and the Press. NJ Government has recklessly and incompetently managed the delivery of the vaccines. The priorities as such maximize the potential for increased mutants. We use WV as a baseline since it has a highly pragmatic approach whereas NJ is highly politically driven one suspects due to the desire of the Governor to be re-elected[1].

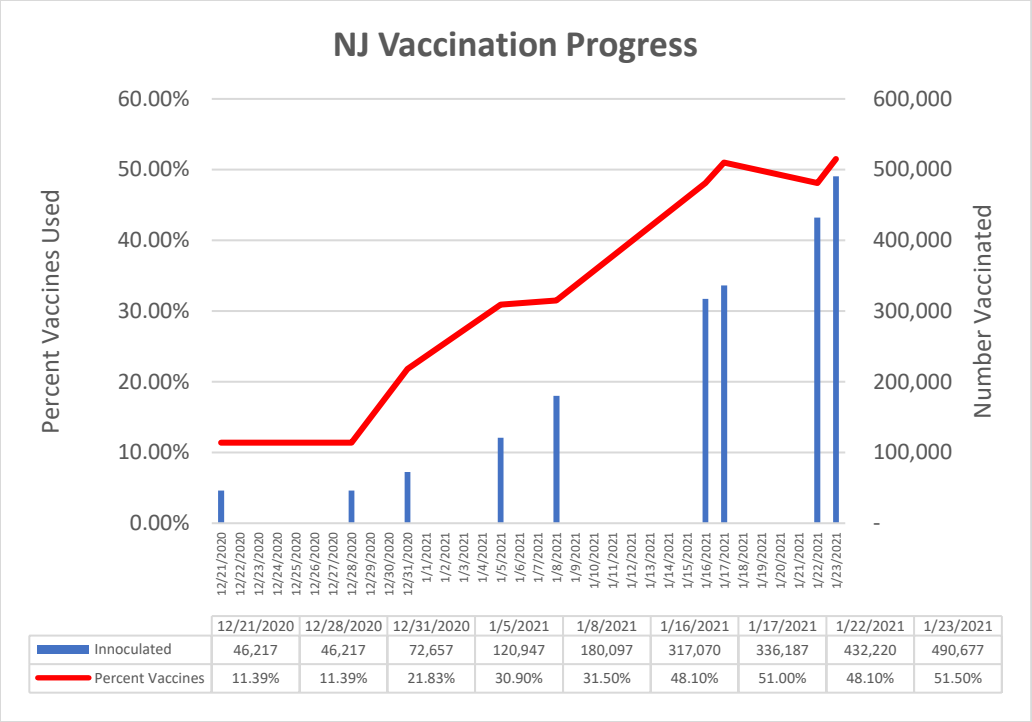


	12/21/2020	12/28/2020	12/31/2020	1/5/2021	1/8/2021	1/16/2021	1/17/2021	1/22/2021	1/23/2021
New Jersey	0.520%	0.520%	0.818%	1.362%	2.028%	3.570%	3.785%	4.866%	5.524%
West Virginia	1.72%	1.92%	2.50%	3.16%	4.87%	7.75%	8.42%	8.94%	10.18%

Vaccination progress is slow. About 50% of the supply has been administered as noted above the administration is chaotic. The Banker and Nurse Ratchet spent the week in DC I gather and some underling may have built the web site to register. It appears to be one developed by someone's nephew who took an online web building course and this may have been a class project. It is clearly the worst design I have ever seen and just does not work. Incompetence reigns in NJ.

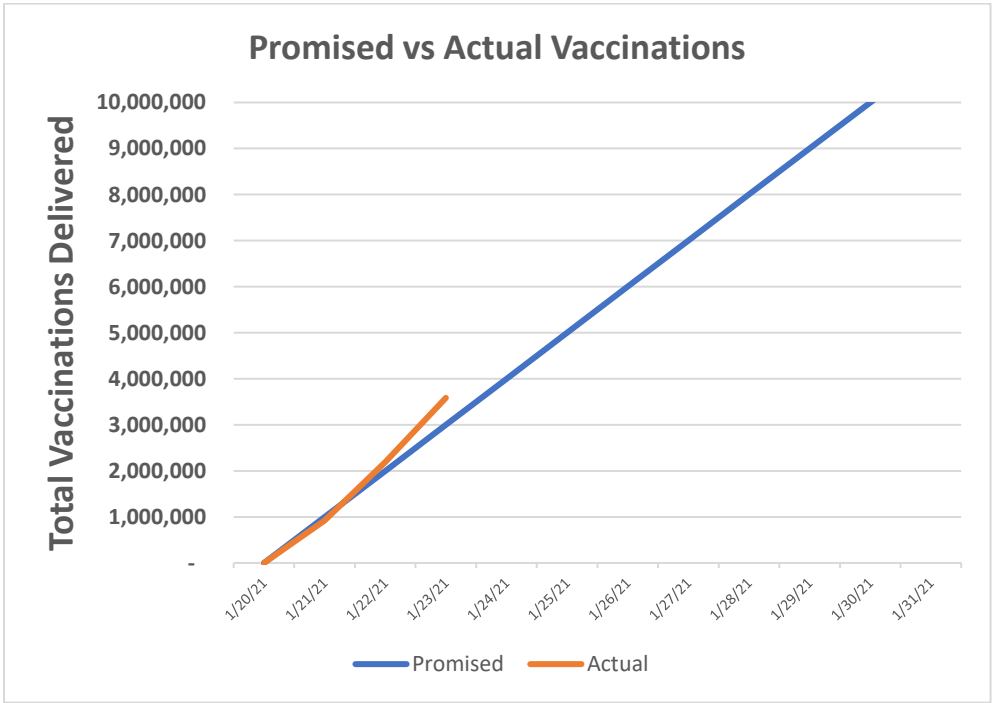
Ijn the following one can see that about 50% of the delivered vaccines have been deployed. One can assume that since these are two dose vaccines that the hold back is for that reason.

[1] One concern is that the Governor was operated on a year ago for clear cell renal cancer. The one year survival is about 50% and then it drops quickly. Thus having a putatively highly impaired candidate is questionable.



	12/21/2020	12/28/2020	12/31/2020	1/5/2021	1/8/2021	1/16/2021	1/17/2021	1/22/2021	1/23/2021
Innoculated	46,217	46,217	72,657	120,947	180,097	317,070	336,187	432,220	490,677
Percent Vaccines	11.39%	11.39%	21.83%	30.90%	31.50%	48.10%	51.00%	48.10%	51.50%

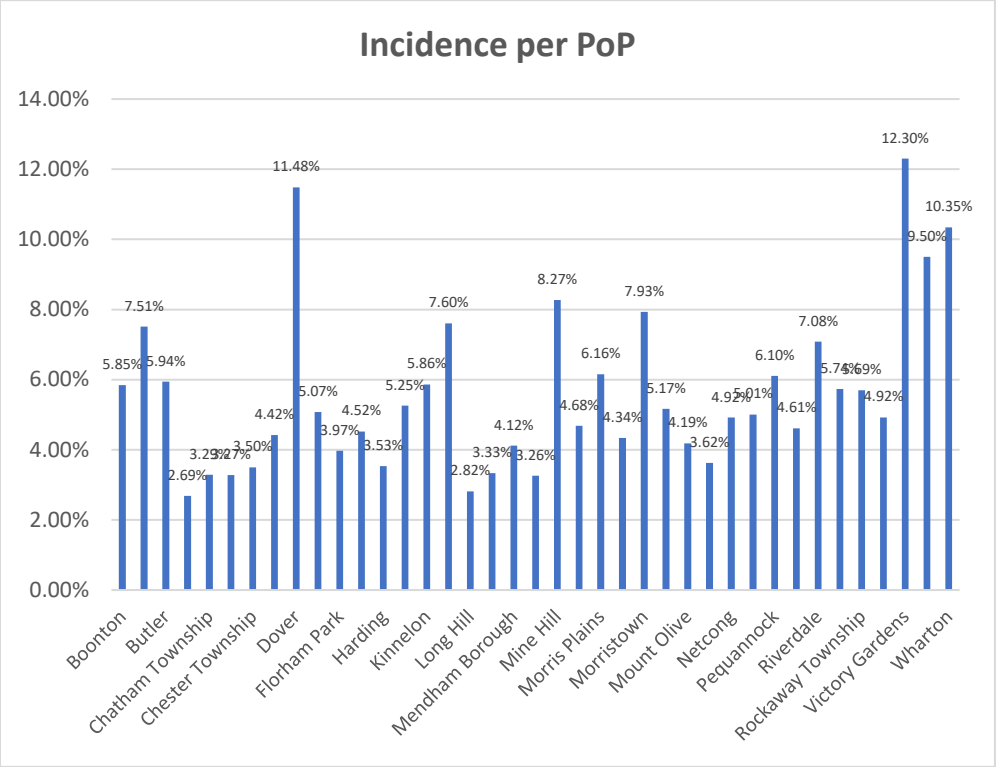
Now the following I have called this the Biden Curve. It represents promised to actual. Strangely the first few weeks will be a Trumpian hold over so we see that hitting 1 million a week is a slam dunk. The promised what was already a fact, at least for now. The challenge is doubling or tripling. I gather the President has promised to give Canada some of the US Pfizer supply so it will make the challenge worse.



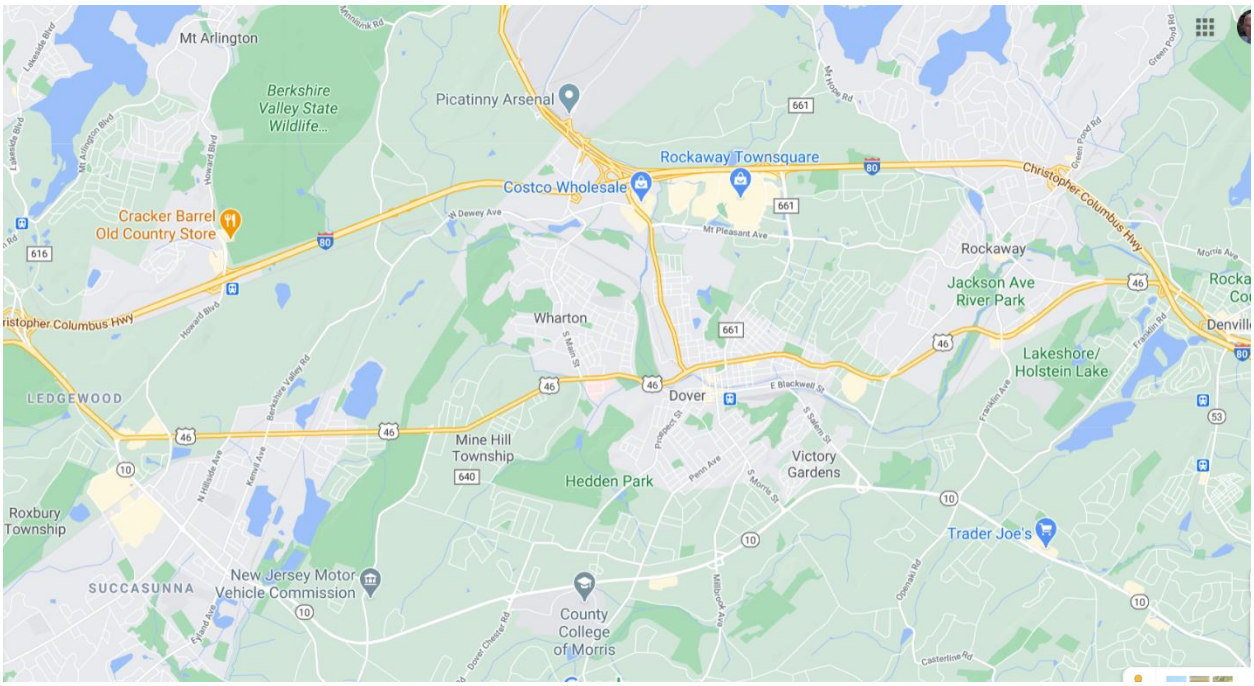
We have found in NJ that vaccine distribution is grossly random. For example there are 20-30 year olds claiming to be smokers getting the vaccine while >75 year olds are left unattended. The smoker idea by the Governor is in our opinion near criminal. The Governor's approach throws millions into the pool creating chaos. Teachers are behind the collection that the Governor and his Health Commissioner have defined.

4 DEMOGRAPHICS

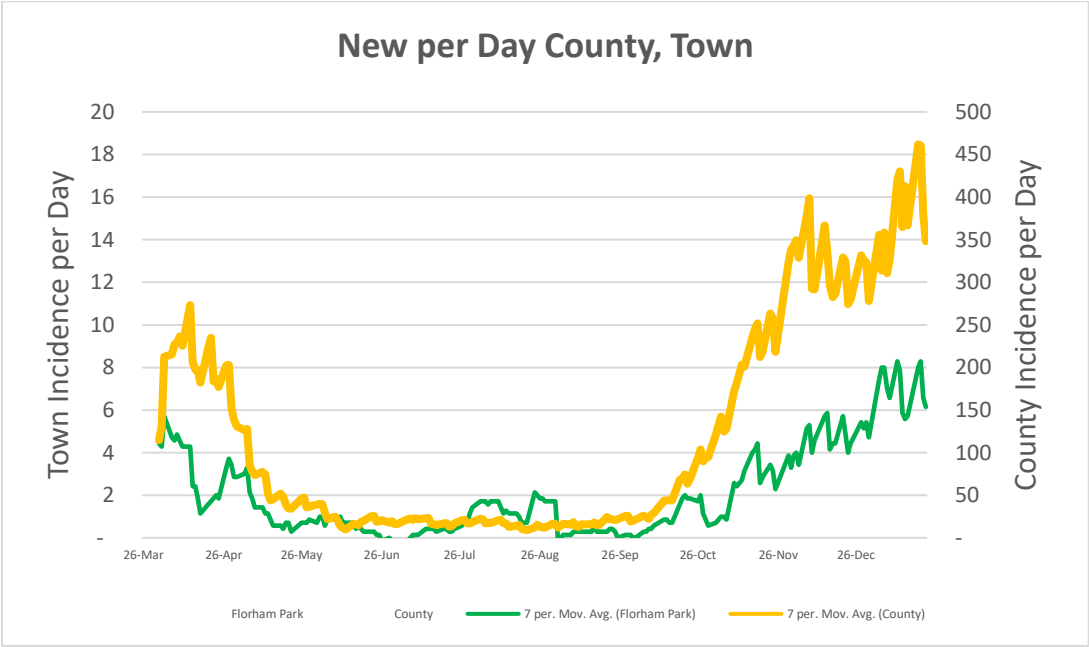
Now we look at NJ details. The county towns show high incidence as noted before. The Dover cluster seems to dominate and it should have been addressed months ago! So much for Public Health. We look at Morris County by town below. The chart depicts the percent of the population in the town recorded as infected.



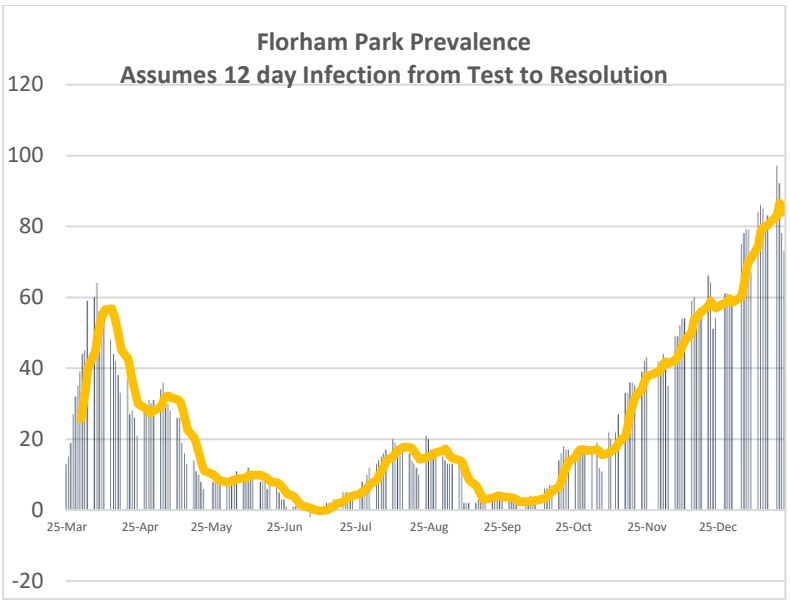
The map of the region is below. It is clear that the cluster around Dover is the highest and is also 87% Hispanic.



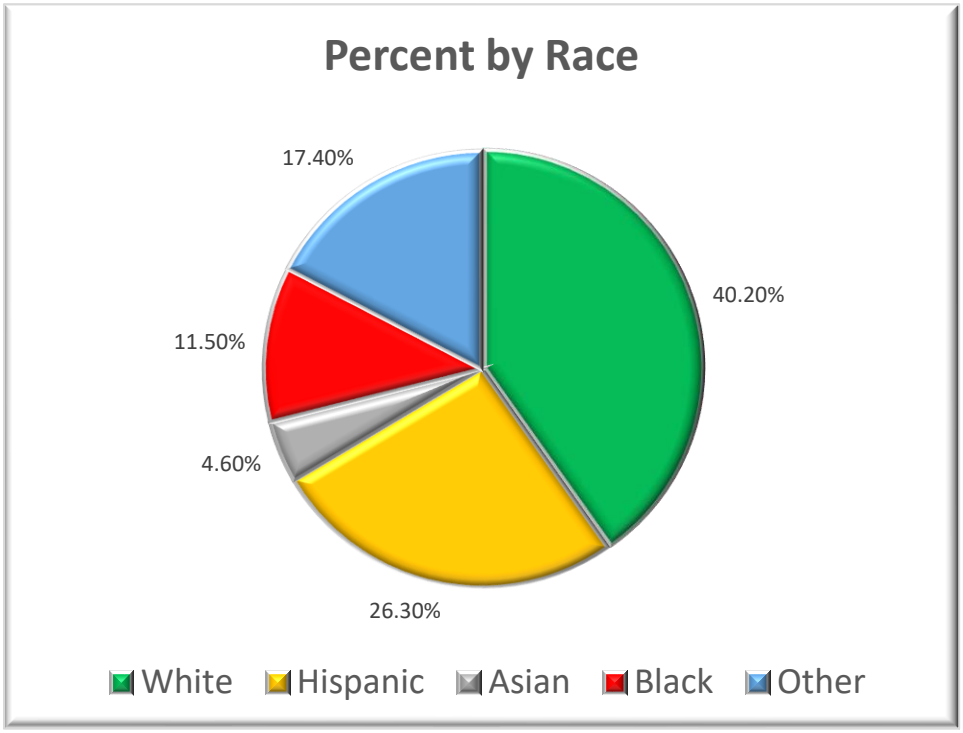
The new cases in County and Town show a flattening as best we can tell. It is post-holiday and hopefully the "families" can get back to "business as usual".



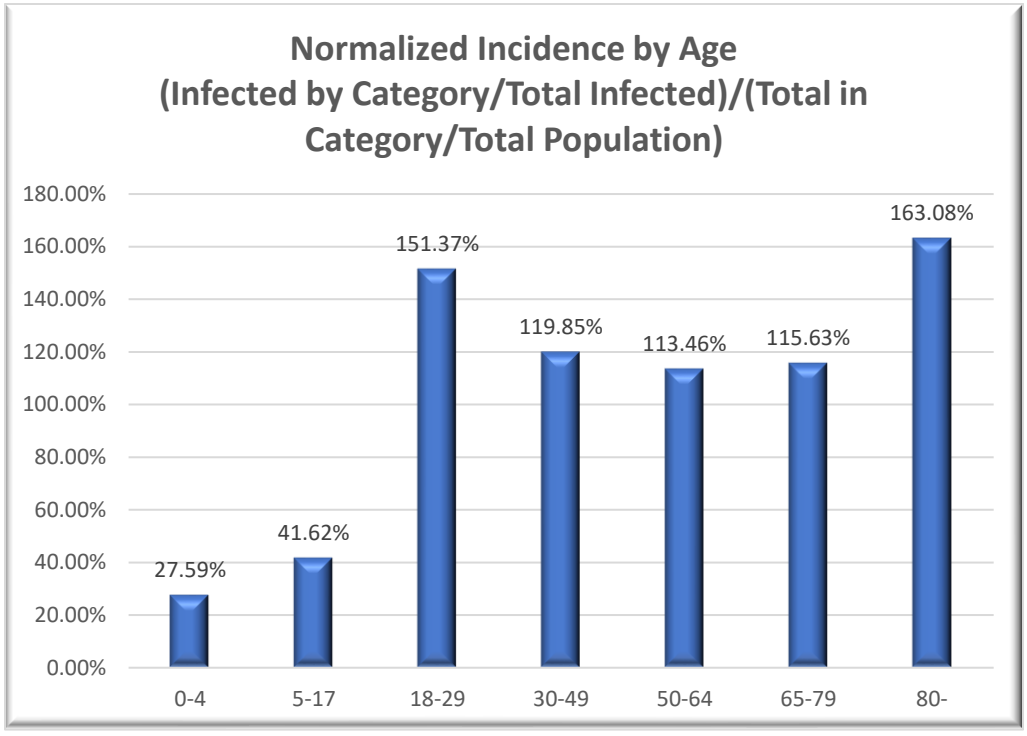
The town prevalence is still peaking. Not clear the problem but the chart below shows 100 people walking around infected and spreading the virus. We shall discuss who shortly.



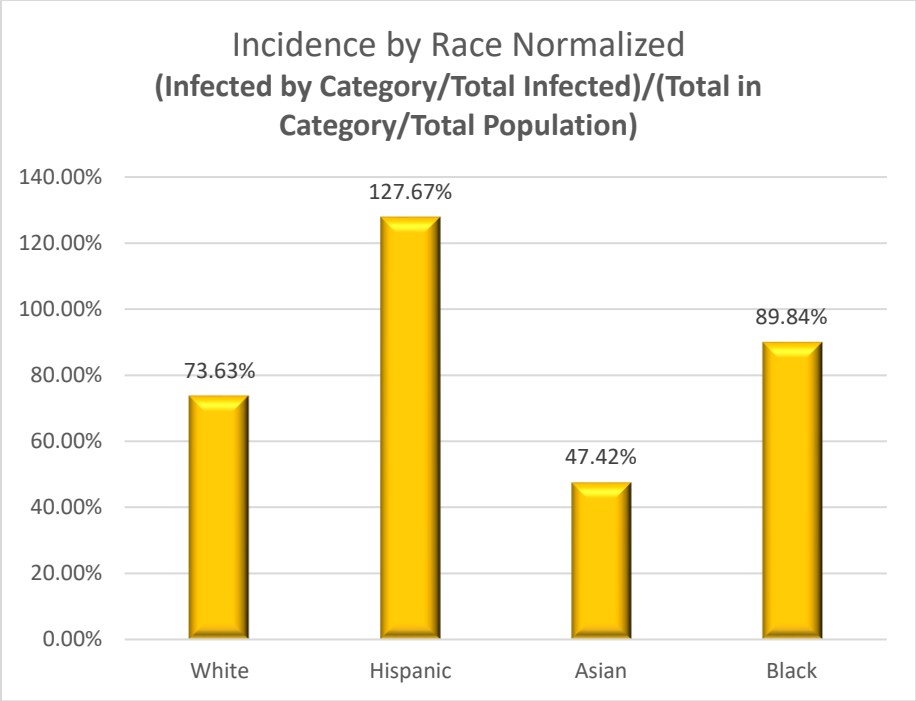
Now for demographics. The chart below is the percent by race. Whites dominate but this must be normalized.



By age and normalized we see the largest are 18-19 and 80+ Not many 80+ but tons of 18-19. They are the spreaders. They are the spreaders! They are reckless, wandering about all over and all hours then spreading upwards to 30-49 and 50-64. This is again a typical public health problem, educating and policing this group is critical. So much of the infection spread can be handled simply by targeting this spreaders.



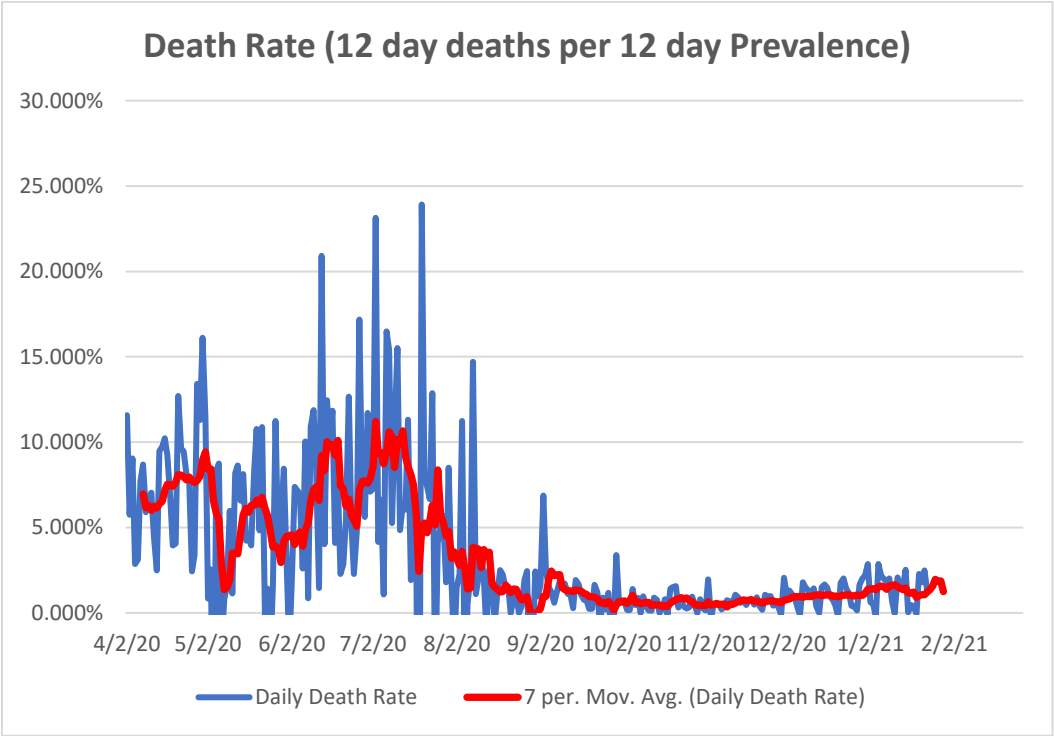
This is the critical slide. The Hispanics are demographically the most significant spreaders. Most work in jobs such as housekeeping and local labor and they live in Dover and cluster towns of high density residences. This is again a simple public health issue which has not been addressed. Now for low Asian counts. As we noted in our paper on Mutations this is due to the fact that Chinese, Koreans, and Japanese have a slightly different genetic ACE2 receptor which reduces the spike protein adhesion and virulence. One would suspect this number is dominated by South Asians such as Indian and Pakistan communities who do not have the genetic advantage of the Chinese.



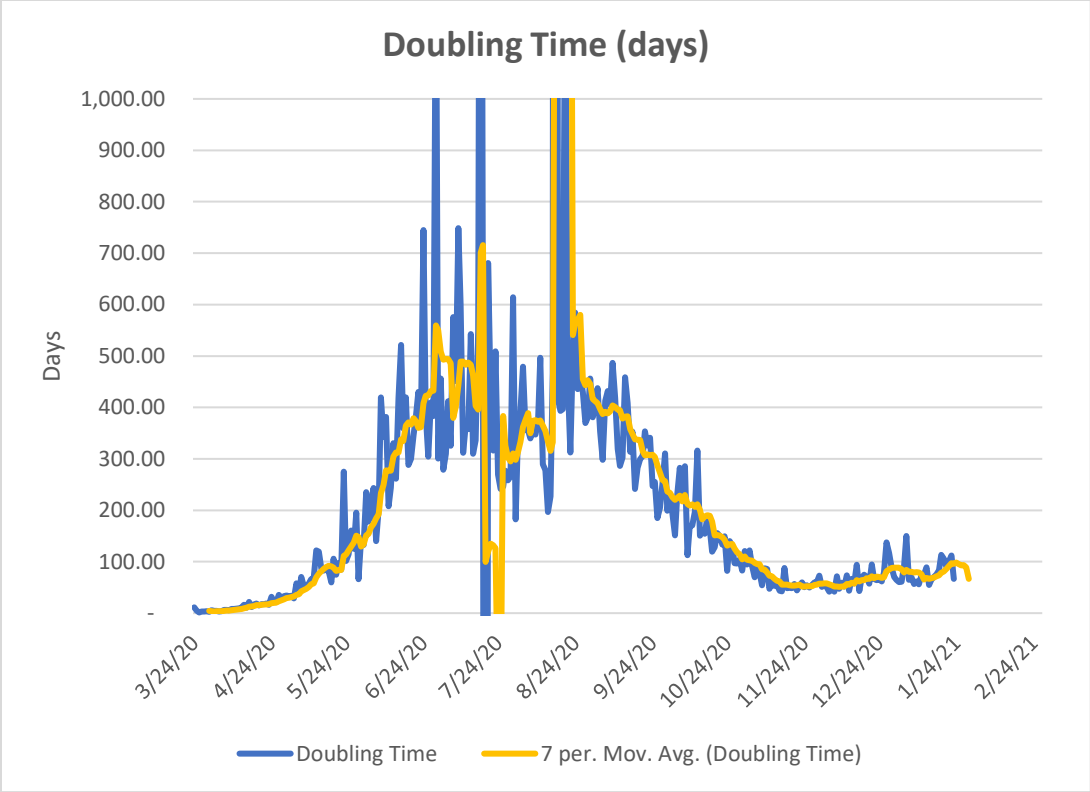
Death rates are running at 2%. Not clear why it has jumped but suspect higher overall infection rates.

5 INCIDENCE AND MORTALITY

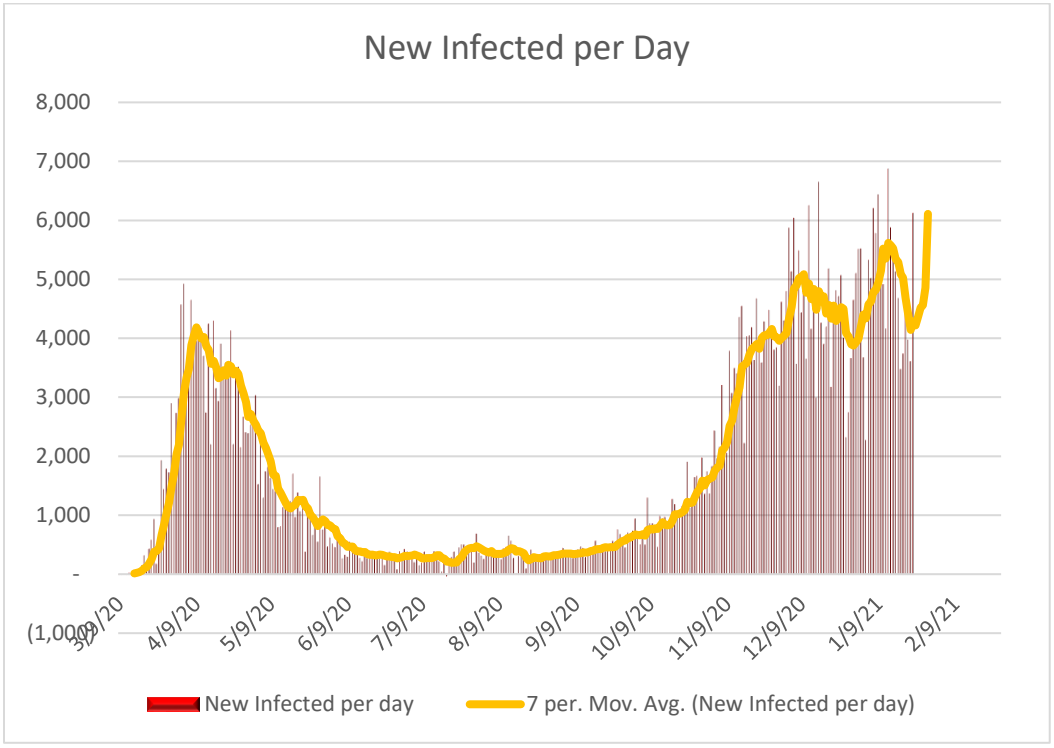
We now examine the mortality. Details are lacking so all we can do is examine the high level data. Regrettably there is no epidemiological data. The daily mortality rate is below.



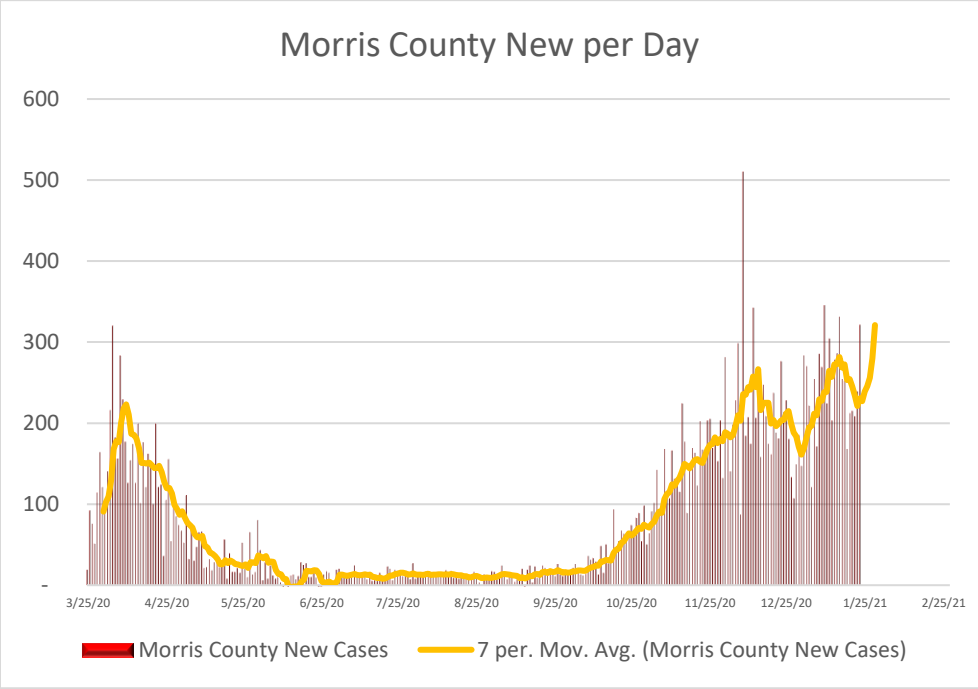
The Doubling time was doing great until yesterday. However I suspect it is the corrupted data reporting problem which has been chronic. Namely what is reported on a specific day may be days or even weeks old.



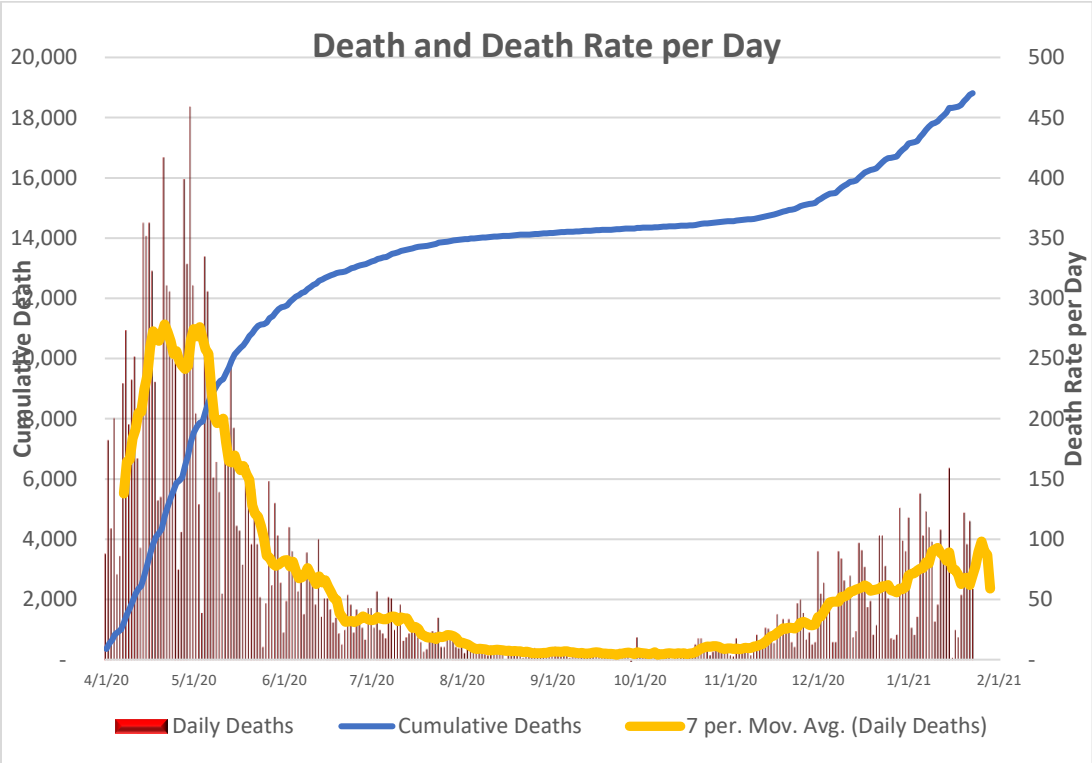
This aberration is shown below for the state. A significant daily increase.



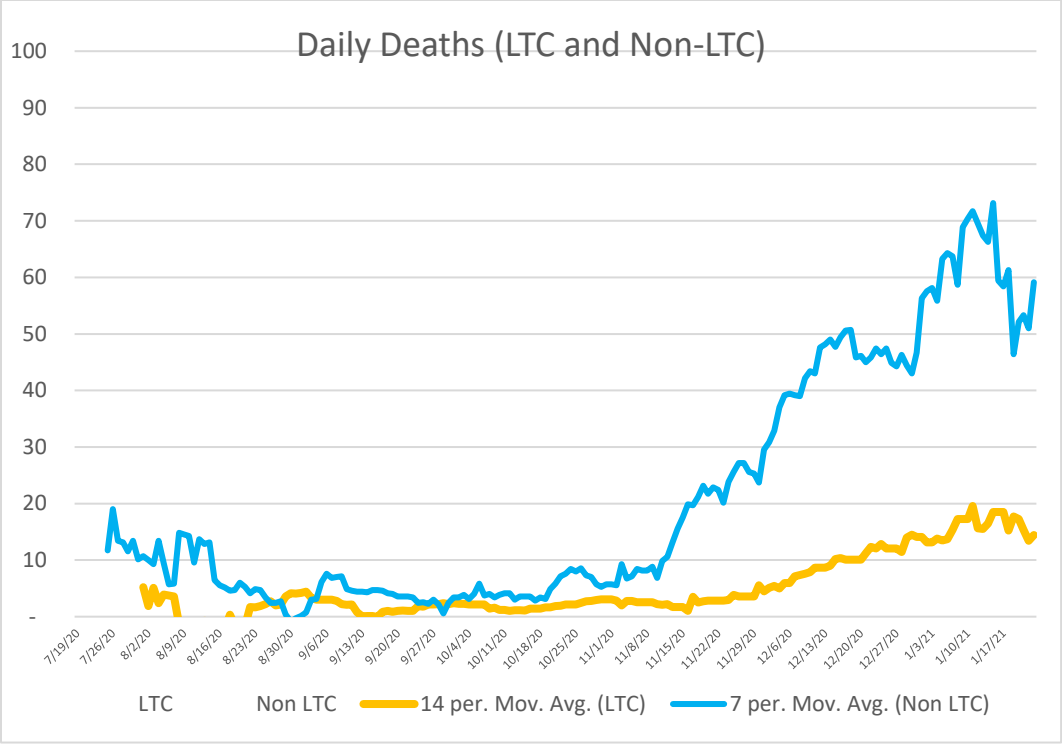
The county is below:



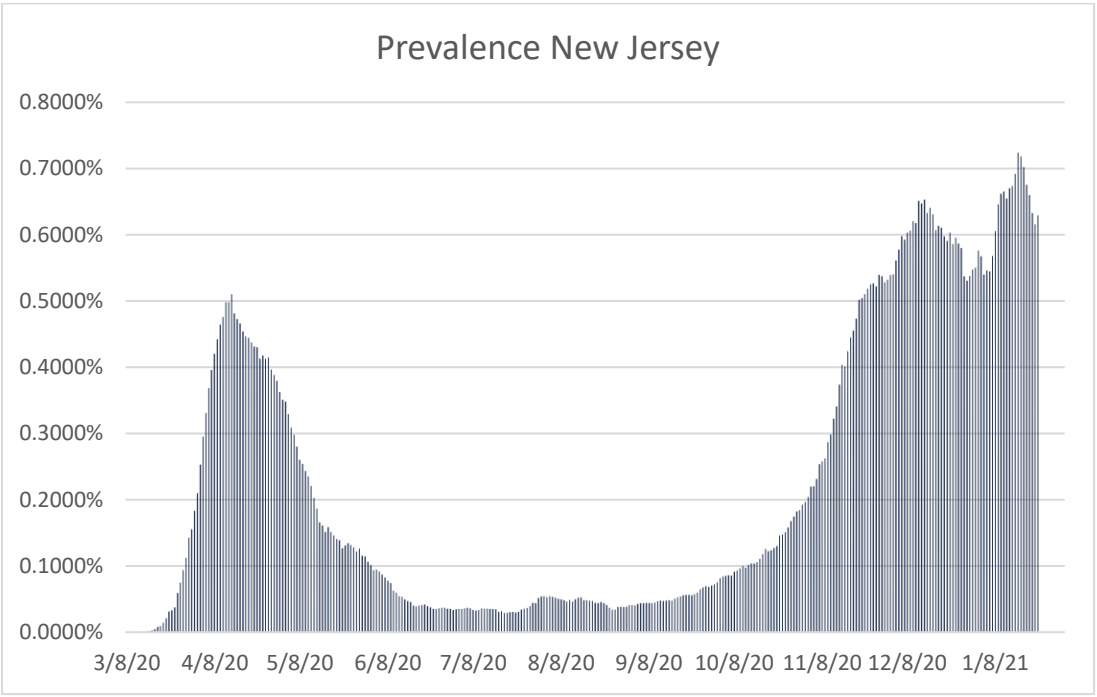
The deaths are shown below slowly decreasing in rate:



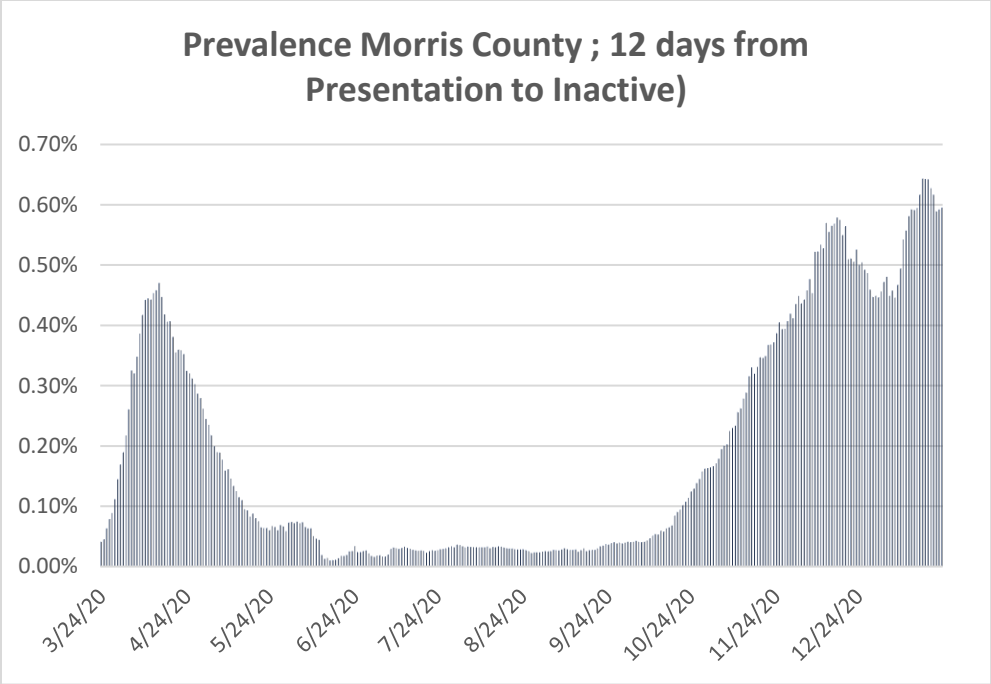
LTC deaths seem to be decreasing but they are still very high. This should have been the first target after health care workers but the gross incompetence of the State has led to another thousand needless deaths.



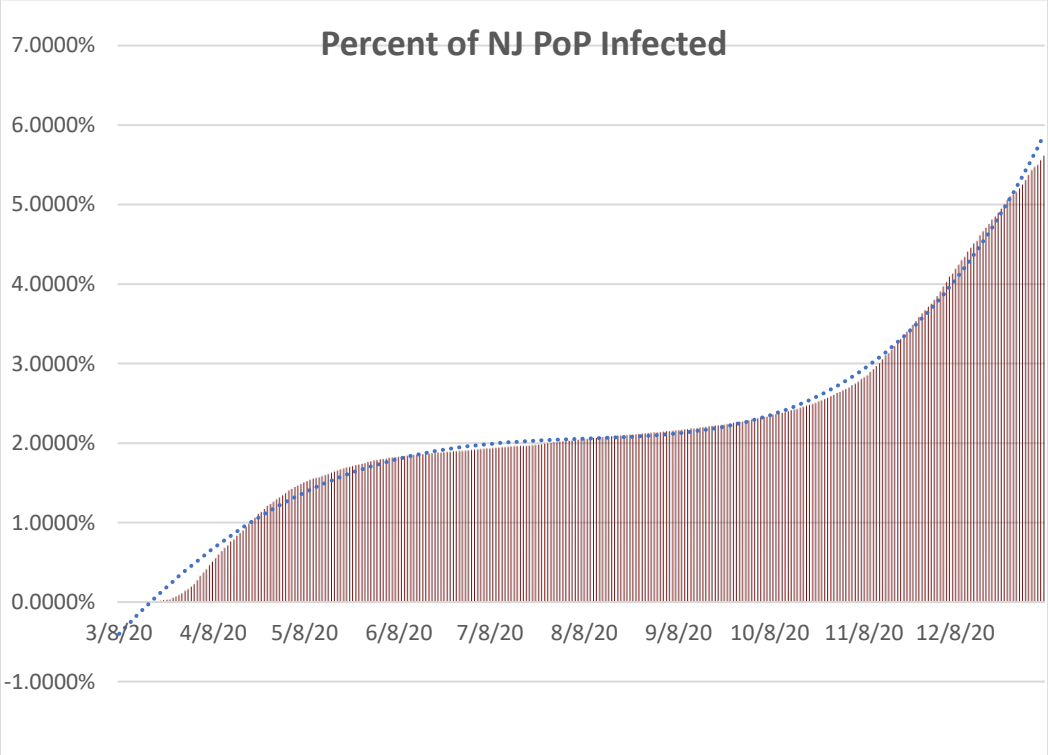
State prevalence is high at 0.6%.



County is also at same rate.

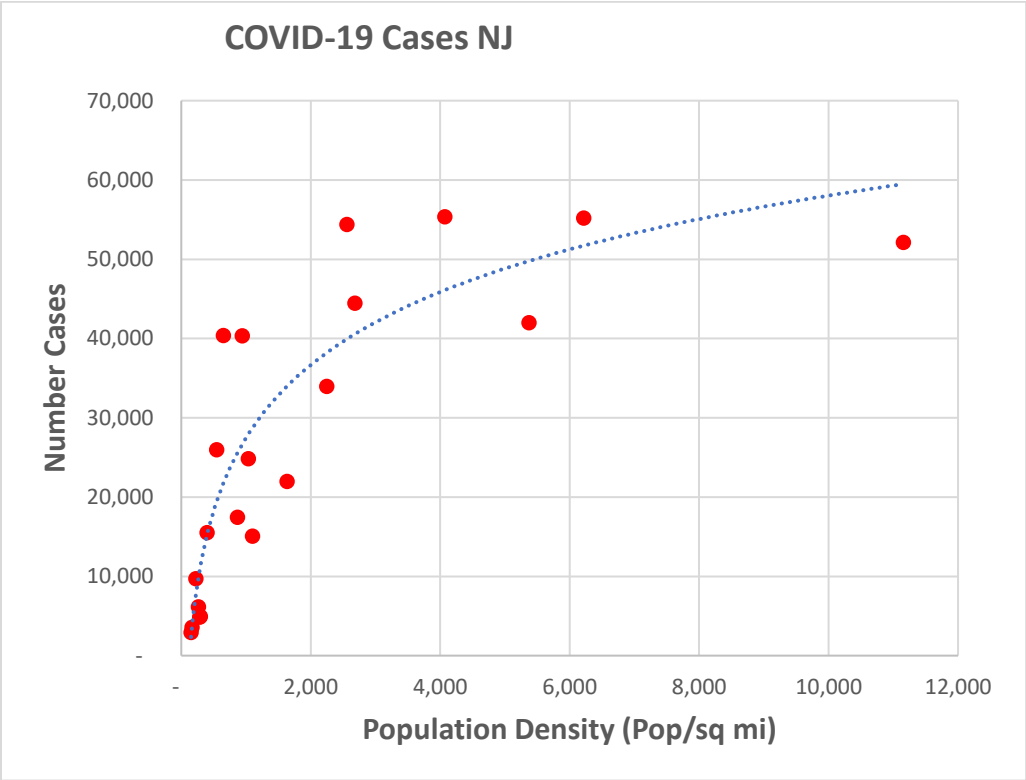


Finally the percent of the State population infected vs time is below.

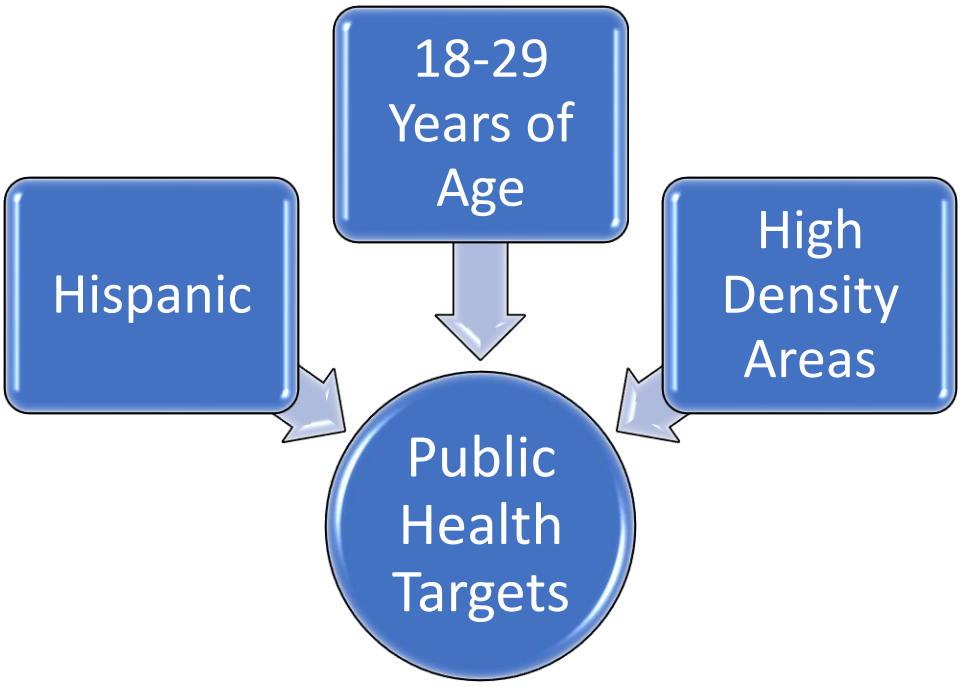


6 TARGETING

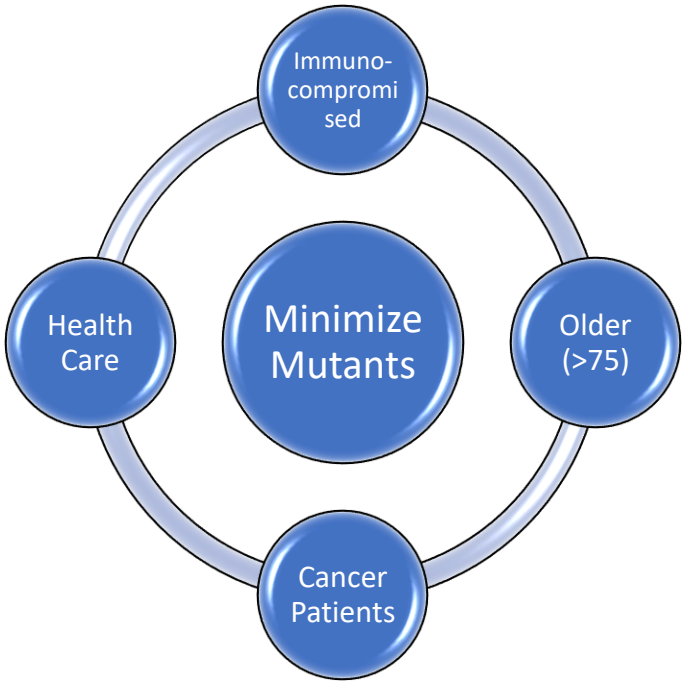
The chart below depicts the infections as a function of population density. As expected the denser the population the greater the infections.



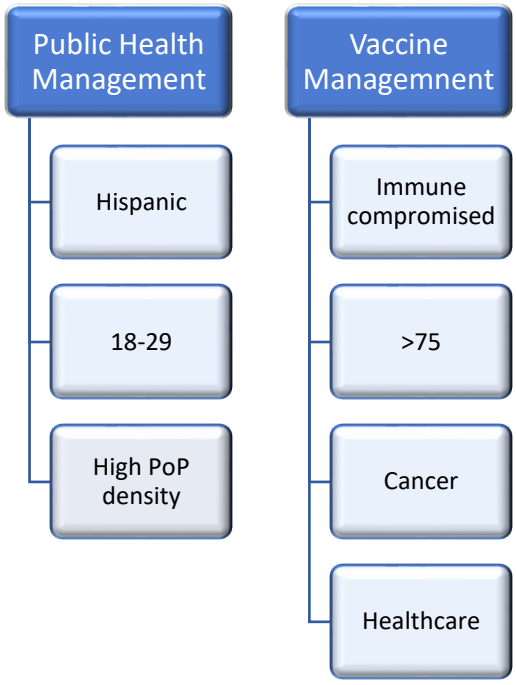
Thus if we add up the above analyses, limited as it may be, we may have the following:



On the otherhand to minimize mutations we must target with early vaccines:



Thus the balance seems logical:



The above are basically countervailing strategies, science and fact based, that minimize mutant propagation. Regrettably the NJ Governor and his staff have delivered what he apparently sees as a distribution strategy to get him reelected and not save lives.

7 KEY QUESTIONS

We will pose several key questions in each report.

1. It has been observed that there are post infection sequellae in various organs such as myocarditis. Is there any understanding of the mechanism of these sequellae? Is there any compilation of their incidence and resultant level of morbidity?

2. Mutations of the mRNA are significant. Since COVID-19 is a classic corona virus, being a single stranded mRNA virus, it is known that mutations can be quite frequent. We know that B.1.1.7 is more contagious yet not more virulent. Is this because the spike proteins match the ACE2 receptor better thus initiating multiple virion particles per cell? Also, it has been noted that there are slight ACE2 receptor proteins on Asians as compared to Europeans. If this is the case does this explain for the lower per PoP incidence in China, Korea and Japan?

3. Mutations occur as long as the patients has not developed an immune response. Thus, in immunocompromised patients, including those ill as well as older patients, present a putative clear and present danger as mutation sources. If so, does not this drive the immunization policy as a scientifically based observation?

4. It has been observed that the virus is related to the development of auto-antibodies and thus autoimmune types sequellae. This may affect a broad spectrum of patients. How can this be monitored and in turn treated?

5. Tracking mutations is critical. Is there any proposed plan to establish a genome database for mRNA tracking mRNAs from infected patients? If so, would the primary focus be on changes in the 3,000 nucleotide spike protein or is it necessary to monitor the entire 30,000 nucleotide mRNA? Should such a database be open and accessible? If so, would there be any patient privacy concerns?