

COVID19 MITIGATION STRATEGIES - RATIONALE AND DATA

The COVID-19 virus has presented three surges in Worcester County since the initiation of the National Pandemic Emergency on March, 11 2020. The first surge occurred from April 2020-August 2020. During that time, our mitigations evolved to include the 3W's,- Wear your Mask, Wash Your Hands, and Watch your Distance. We also converted to remote work, remote school and shutting down many elective services at the hospitals to prevent an overwhelming of the system. We found that over the end of summer into early fall that daily case counts receded. The hospitals tried to resume business as usual and the patient mitigations, like the DCU Center Field Hospital for overflow COVID-19 patients that had been initiated in the spring, were shut down. New treatment strategies became available like Remdesivir and convalescent plasma therapy.

Halloween gatherings were discouraged but despite that, mid-November saw a rise of the 2nd surge which worsened post-Thanksgiving and compounded in the weeks after Christmas and New Year's into January and February 2021. Now an important new mitigation - vaccination with Pfizer, Moderna or Johnson & Johnson - became available and the most important strategy in helping the numbers recede again come the springtime. The Worcester Division of Public Health, UMass Medical School and Commonwealth Medicine created a Vaccine Corps to help vaccinate. May 29, 2021 was the official reopening of the region and on June 15, 2021 the Pandemic Emergency was declared to be over, signaled by Governor Baker's orders being rescinded.

Shortly thereafter, the Delta Variant reared its ugly head and became the predominant mutation in a matter of 4 weeks starting in June 2021. *As this switch occurred, it became apparent that the relaxation of mitigations had been done prematurely.*

This third surge has been called the pandemic of the unvaccinated. It started in August 2021 and proceeded right through the middle of October. This coincided with the Labor Day Holiday, the return to primary, secondary schools and institutions of higher learning. *The new variant was at least 50X more transmissible. The viral loads generated in the unvaccinated population allowed for even the vaccinated exposed to these individuals with Delta infections to get "breakthrough" infections in vaccinated individuals.* These breakthrough infections were largely asymptomatic or minimally symptomatic and only resulted in a 6-10% hospitalization rate- once again proving the efficacy of the vaccinations. But what was also learned was that the *vaccinated COVID-19 patient with Delta infection could be a silent spreader of the virus, so that masks were once again an important tool to curb that spread. To curtail the 3rd surge, emergency indoor mask orders, ratified by local boards of health in Worcester, West Boylston and Shrewsbury were initiated.* Other mitigations, such as curtailing crowd sizes, lockdowns, vaccine mandates and vaccine passports have not yet been invoked because of the confidence we have that between getting more vaccinations and the successful transmission reduction from mask usage will stem the tide.

The winding course of the pandemic has left many frustrated. Unvaccinated people who have had COVID-19 in the first two surges are often in natural or native immunity. But this is not true of the Delta Variant. Unvaccinated people whose hesitancy/resistance to vaccination has left them to be the continued source of propagation, mutation, exposure of the people vaccinated and not, and hospital admissions. The vaccinated have been wondering "what's the use of having gone through the vaccination if there is no advantage given?" and they still are being asked to wear masks indoors. The vaccination has greatly reduced the vaccinated from getting a severe case or hospitalization from

COVID-19. *But the mask is what is keeping them from being unwitting spreaders or being overwhelmed by the viral load of an unvaccinated person in their midst.*

We are now cautiously optimistic. After 10 straight weeks of rising Delta Variant infections regionally, we have had case numbers recede the last 4 weeks. The rate of community spread is still too high. We are all encouraged by this trend. *But we have learned from the original two surges that relaxing the mitigations prematurely can lead a simmering of new variants that eventually can lead us into a fourth wave which we desperately want to avoid.*

When do we relax the mitigations? There are no formulaic answers. No one or two metrics that will be our bellwether for what we need to achieve a "normal" situation again. The weather will be driving us all indoors. We will be engaged in family gatherings and extensive travel that accompanies Halloween, Thanksgiving and Christmas/New Years of 2021. We need to give our community time to declare what the level of community spread is in this critical period. It takes 2-3 weeks after a major holiday to see if we get a bump in case numbers. This was seen with the third surge where September 17, 2021 was our peak after Labor Day and the school openings. We must see what happens by December 13, 2021, or two weeks after Thanksgiving. If the numbers don't bump up by then, we would consider re-evaluation of the policies going into Christmas week.

Many people are accruing considerable misinformation about the public health policies on social media that are not trustworthy. No one can accurately predict how any individual weathers a COVID-19 infection. And no one can know as yet the long-term effects of COVID-19 on individuals. There are large numbers of COVID-19 Long-Hauler Syndrome sufferers from the first two surges who can attest to that. We will continue to try to get more needles in arms, particularly of the last block of unvaccinated people, kids between 5-11 years of age, when their vaccine is approved. We will also be trying to augment the Vaccine-induced immunity with boosters in at least the population of Long-Term Care Facility dwellers and their caretakers, elderly people over 65, first responders and folks who are immunocompromised. Stay tuned for announcements on the vaccination programs for these populations.

I would urge the public to trust that Public Health providers are doing everything in their power to help us navigate this pandemic with the goal of doing the greatest good for the greatest number. Masks have prevented death and hospitalizations for more than 20 months now and we can live with that. Please help your family, your community and yourself by heeding the advice from your local public health officials and we will make 2022 a much more normal year.



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