



MASSACHUSETTS MEDICAL SOCIETY

Every physician matters, each patient counts.

April 7, 2021 MMS/DPH Call Summary and Q & A

On April 7, the Massachusetts Medical Society (MMS) hosted its bi-monthly COVID-19 conference call for physicians with the Massachusetts Department of Public Health (DPH). Larry Madoff, MD, Medical Director, Bureau of Infectious Disease and Laboratory Sciences, Catherine Brown, DVM, MSc, MPH, State Epidemiologist and State Public Health Veterinarian, and Kerin Milesky, Director, Office of Preparedness and Emergency Management participated. DPH officials provided updates on the status of the pandemic, hospitalization rates, variants of concern, and the new MassNotify COVID-19 exposure notification technology currently being piloted in the Commonwealth. DPH officials also responded to member questions asked during the call.

COVID-19 Update

Dr. Madoff:

- The Commonwealth is at a strange point in the pandemic. Although we are seemingly past the winter surge, Massachusetts is currently seeing another uptick in cases at the same time its expanding vaccine eligibility and working hard to get as many people vaccinated as possible.
 - This latest upward trend is worrisome, especially due to variants of concern with increased transmissibility circulating. The United Kingdom (U.K.) B.1.1.7 is the dominant variant in the state.
 - New cases are being driven by younger populations than previously recorded.
 - The surge is likely being offset by vaccination and likely also from immunity from the disease since Massachusetts has documented well over 500,000 COVID-19 cases in Massachusetts and the actual number of cases is likely much higher.
 - There is reason for optimism and hope with the arrival of the vaccines. However, until enough of the population is vaccinated, we must continue to be cautious.
 - DPH urges everyone to maintain the infection control measures in health care settings as well as the public health measures including continuing to wear face masks, social distancing, and refraining from gatherings and travel.
- It is a miracle that there are three safe and effective vaccines for COVID-19. These vaccines are being rolled out in large numbers throughout the state. There are over 200 vaccination sites now in Massachusetts.
- More than 4 million doses of vaccine have been received in Massachusetts, and more than 1.5 million people have been fully vaccinated.
 - Most individuals in long term care (LTC) facilities and in other congregate care settings are fully vaccinated.
 - A substantial number of those 75+ and 65+ have already been vaccinated.
 - All individuals 16+ will be eligible for vaccination on April 19, 2021.

Hospitalization Update

Ms. Milesky:

- Net COVID-19 hospitalizations have increased by 30% in the past 18 days. On March 20, 2021, there were a total of 580 COVID19 hospitalizations there are now 755 hospitalizations.
- DPH is watching this increase very closely and staying in touch with the regional Health and Medical Coordinating Coalitions (HMCC). Hospitals continue to participate in the HMCC led Regional COVID-19 Hospital Preparation and Response Planning weekly meetings according to DPH's resurgence plan.
 - DPH is seeing the hospitalization an increase across all regions, although slightly less in central Massachusetts.
 - While hospitals are busy, there is no need at this time to load balance across facilities either within or outside regions which was happening during the second surge.
 - There has been no curtailment of services. DPH is monitoring the numbers closely and stands ready if assistance or resources are needed.

Variant Update

Dr. Brown:

- The U.K. B.1.1.7 is the variant most widespread in Massachusetts. DPH is seeing significant community transmission of this variant.
- A cluster of the Brazil P.1 variant has been seen in Barnstable County. It is associated with a large transmission event. There was clearly a P.1 case in the venue, and it has resulted in a relatively large cluster, and it is now making its way into the community.
- We are increasingly seeing P.1 cases identified outside of Barnstable County that have nothing to do with that large transmission event. An analysis by the Broad Institute last week said that, at that point, there were at least five introductions of P.1 into Massachusetts. There have been so many new cases identified over this last week DPH suspects that there have been more introductions now.
- The B.1.351 variant, first identified in South Africa, is the scariest. Not only is it more transmissible, but there's some data to suggest that both vaccines and monoclonal antibodies might be somewhat less effective against it. At this point, it remains very rare in Massachusetts.
- The Commonwealth will be dramatically increasing its sequencing between State Laboratory and the Broad Institute. Not all positive cases will be sequenced, but rather a reasonable random sample of cases will be sequenced in order to provide a good understanding of what variants are circulating in our environment. There will also be smaller efforts to make sure that we're sequencing particular cases that represent interesting situations such as reinfections or vaccine breakthrough cases so that we can get an idea of how the variants may be affecting reinfection and vaccine breakthrough in Massachusetts.

Exposure Notification Technology

Dr. Brown:

- The Commonwealth is piloting a new exposure notification system called MassNotify. Contact tracing is one of the best ways to stop the virus from spreading. With this technology, DPH can send an alert to your smartphone if you're exposed to COVID-19.
- MassNotify is an opt in system for your smartphone that uses Bluetooth technology.
 - Participation is entirely voluntary. Users can opt in or opt out at any time.

- When two people who have enabled MassNotify are near each other their phones exchange random number codes called keys using Bluetooth.
- When a person with MassNotify on their phone tests positive for COVID-19 they will receive a text message with instructions on how to anonymously share their test result with other users through MassNotify.
- Phones enabled with MassNotify that had exchanged random numbers in the last 14 days will receive an anonymous alert about their possible exposure to COVID-19. When someone receives a notification about possible exposure, they will only know that someone they were near recently has tested positive for COVID-19, and the date they were exposed. The alert will have a link to information about what to do next to protect themselves and others.
- The system does not share any location data or personal information. DPH is not going to know who is using MassNotify on their phones and they will not be collecting that information, rather this is designed to be another tool that people can use to help protect themselves and their communities.
- Individuals can go to: <http://www.mass.gov/MassNotify> to learn more.
- The program currently still in the pilot phase and being tested in Somerville and Methuen. DPH is aiming for a statewide launch of MassNotify at end of April.

DPH responses to questions asked during the call:

Question: *We are likely in mini-surge. What are implications for in-person school?*

Dr. Madoff: In-person schooling has huge advantages for kids, for their parents, and for society as a whole. We have learned that kids, in general, do not get seriously ill with COVID-19. For the most part, K through 12 faculty, staff, early education staff and teachers have been vaccinated or at least the vaccine is made widely available to them which has reduced one of the major concerns that people have about going back to school. It isn't going to be easy. I have no doubt that kids can get COVID-19, and transmit COVID-19, perhaps at lower rates than others. We are definitely going to see cases in the school, and we're going to see transmission in the school until the time when we can begin vaccinating kids. That's certainly not going to happen before the fall semester. One of the programs that the state has made widely available is pooled testing for schools which allows some school districts to have testing of kids in school. Tens of thousands of kids are currently part of the school testing program. The rate of positivity in those schools has been astonishingly low, less than 1%. It's something that we're going to have to keep a close eye on. In-person school is a risk, but it's a risk that we're choosing to take as a society because it's so important for our kids. But it's also something that we're going to have to keep watching very closely.

Question: *How does the current increase in cases harm our ability to be fully open and get back to whatever our new normal is months from now?*

Dr. Madoff: There are many factors at play. The major one is the possibility for the introduction and emergence of variants. Variants occur when there's transmission and when there's widespread virus. That is the major risk of the mini-surge that we're having. The other risk is that we have another big surge. Reopening and schools opening are factors that could contribute to a real surge with high numbers of cases that could require us to go backwards. All of us would really like to avoid that. I remain optimistic that the widespread availability and uptake of vaccine will avoid that scenario. That's the unanswered question. We're closing in on 30% of people who have gotten at least one dose of vaccine, but are we going to get to a 70% or 80% vaccination rate? Right now, we're in a situation where demand is outpacing supply, but I do worry about the

tipping point when we switch from a shortage of vaccine to a shortage of people willing to get vaccinated. I remain hopeful that the vaccine will help bring us to a more normal environment by the summer, but it all remains to be seen.

Questions: *What is the newest science on antibody testing? Patients with vaccine hesitancy are curious about whether they should be vaccinated if they have antibodies?*

Dr. Madoff: We have not seen a lot of new information on antibodies. The presence of antibodies in most antibody tests that are FDA approved or authorized are a reliable indicator that someone has had COVID-19 infection in the past. That being said, we know a lot more about vaccine-induced protection against reinfection than we do about immunity from prior illness. At this point, we're getting pretty far out. Many of the people who were infected with COVID-19 were infected a year ago or even earlier. Just how durable and protective that immune response is something that we don't have the answer to. Reinfection (second infections) are not common, but they occur. I would not be reassured by having an antibody nor would I let that persuade me from getting vaccinated. We know that vaccination for people who have had prior COVID-19 is safe. It does not appear to increase the rate of complication. Vaccination does tend to increase the beneficial antibody responses in someone who has had previous illness, but there's no evidence that adverse events are caused. There are actually anecdotal reports that some of the chronic symptoms related to COVID-19 are alleviated by the use of vaccine. Again, I would caution against relying on an antibody test as a reason to not get vaccinated.

Question: *I grew up, live and work in New Bedford. Do you have any updates on vaccination efforts for the 20 communities that are hotspots?*

Dr. Madoff: The DPH Equity Initiative has targeted 20 cities and towns with socially vulnerable populations that have been particularly hard hit by COVID-19 with a multi-pronged approach. The goal is to reduce barriers to COVID-19 vaccination, increase awareness of vaccine safety and efficacy, and increase vaccinations. Efforts include a dedicated liaison at DPH, dedicated funding, enhanced communication, and working on outreach with a number of organizations within these communities, including local boards of health, local government, faith-based centers, community health centers. DPH is directing considerable resources to reach these communities. An important part of the initiative is having data available on these communities to help guide our efforts. Many of these communities remain highly under-vaccinated. DPH is eager to work with you and others to get these communities vaccinated. The website: www.mass.gov/covidvaccineequity offers more information including what is happening in each community.

Question: *Do you know what the allotment of the Johnson & Johnson vaccine will be? We heard there was going to be a big amount of that vaccine coming, and then there are the problems with the Johnson & Johnson manufacturers. Do you know what Massachusetts' allotment is going to be? MMS is hopeful that there will be an opportunity for practices to receive one of the more easily stored vaccine like Johnson & Johnson for their patients.*

Dr. Madoff: The answer is we don't know at this point. We're getting our allocation a week at a time. There was a lot of optimism that there was going to be considerable amounts of that vaccine, and that was going to get to large populations fully vaccinated more quickly. Unfortunately, that that hasn't happened. Last week we received about 100,000 doses of Johnson & Johnson, but that was a one-time allocation that has been largely used in situations where there's a huge advantage to having a single-dose vaccine. For example, in our homebound population. We're also trying to utilize it other settings where it's difficult to get people to a second dose at times. It's also been deployed to round out availability of the vaccine overall. I agree it has

great potential advantages for use in primary care office settings. I remain hopeful that as the supply of vaccine expands, that that becomes a part of our allocation strategy.

Question: *As a primary care physician (PCP), I urge the state to think about how to get vaccine to PCPs at some point in the future. PCPs are a resource for patients who have language problems, computer problems, and transportation problems. My question is do you anticipate there will be the need for a booster in the fall? If so, how do you anticipate giving out boosters when there's such variation in vaccine administration (many health care workers were vaccinated in December and there will be people who are vaccinated in May)? Would you anticipate rolling out vaccine boosters as is done with flu shots?*

Dr. Madoff: I truly appreciate your comments about primary care. It's an argument and a case that we are completely aware of. I think that primary care providers will have a major role to play as the supply expands. With regard to the need for reimmunization or booster doses, we just don't know the answer yet. We're only beginning to see data on duration of immunity. In the New England Journal of Medicine yesterday, there was a letter looking at duration of antibody responses from the Moderna mRNA vaccine which showed impressive durability of antibody responses, including neutralizing antibody responses, at seven months. It was a small number of patients, but it spanned age groups and the shape of the curve suggested that at least the antibody response was going to be long-lived. That being said, we don't know yet what the need for booster doses is going to be, or what time point they're going to be required. We also don't know yet whether we need to tailor the vaccine towards the variants -analogous to how the flu vaccine is redesigned each season based on prevalent strains. The evidence on the effectiveness of vaccines in the face of variants isn't completely clear yet. There's pretty good evidence that the currently available vaccines do prevent serious illness. There is also data from some vaccines suggesting that there is some loss of effectiveness against some of the variant strain. We don't know for sure yet. This is extremely important and subject of a lot of investigation. We will need to stay tuned to find out what reimmunization may be required and at what interval it should be administered.

Question: *Production of vaccine is ramping up, President Biden has moved up the date which all adults can be vaccinated, and there are those with vaccine hesitancy. Do you expect a point this summer where there will be a vaccine surplus? If so, is there a strategic plan over the course of 2021 and going into 2022 for the pediatric population, or as a benevolent nation do we then start to assist the rest of the world in their vaccination programs?*

Dr. Madoff: I would be really hesitant to try to predict what's going to happen. We are now seeing a huge excess of demand relative to supply of the vaccine. As supply increases, and the percentage of the population eager-to-be-vaccinated population is vaccinated, I think there will be more vaccine than willing recipients at some point. That assumes that everything is going to go well in terms of vaccine production, that there will be availability of vaccines, and that we will be able to reach a large percentage of the population. We are all familiar with the issues around vaccine confidence and encouraging people to get vaccinated. Our rates of influenza vaccination have never been great and as the panic around COVID-19 subsides, there may be less of an urge to get vaccinated. I don't know. We have a communication strategy in the state and the Centers for Disease Control and Prevention (CDC) is rolling out information nationally about the importance of vaccination. A number of universities have already announced a requirement for vaccination for returning students. I think things are going to shift. I'm hopeful that vaccine will be available to kids as soon as the summer. There's already been some pretty good clinical trial results, down to age 12, showing robust effectiveness of the mRNA vaccines in kids and a favorable safety profile. I'm optimistic that maybe before the fall we'll see the availability of the vaccines for kids.

Question: *The single dose vaccine could be useful for those with needle phobia. The number of people who have that fear is not as small as we might hope. I have a two part question. Could we use those clamoring for COVID-19 vaccine as way in which to get other important vaccines into arms? Also, is there a compendium for physicians with talking points to counteract untruths and misinformation on vaccines using fetal materials or other religious or political beliefs that contribute to vaccine hesitancy?*

Dr. Madoff: Our initial concerns at outset, that the single dose vaccine would not be accepted due to lower effectiveness, has not borne out. I agree that it's a great choice for those who desire only a single shot and I hope the single dose vaccine availability continues. It would indeed be great if the COVID-19 vaccine enthusiasm expands to other vaccinations. Our pediatric colleagues have always been the leaders in vaccination and Massachusetts has always led the country in vaccination rates for the pediatric population. Assuming that COVID-19 vaccines become part of the pediatric immunization schedule, I expect that that will continue. In the 1950s, there was considerable enthusiasm for the polio vaccine and that grew to an enthusiasm for other vaccines and to public health in general. I hope that happens. By the way, this is National Public Health Week. I want to mention that and thank my many colleagues who work in public health for all their work. I really do think that the enthusiasm around COVID-19 vaccines might help us improve our uptake of other vaccines in adult populations. Your other question about vaccine confidence and misinformation is such an enormous problem. I certainly don't have the answer to that, but there are people who work in this area. There's a body of knowledge and a body of evidence that's accumulating around vaccine confidence. I say over and over again, the single most important factor in acceptance of vaccines is a strong endorsement from providers. When patients' doctors tell them that they would get the vaccine, that they recommend the vaccine, that they should get the vaccine, that is the most important factor in getting people vaccinated. Countering misinformation is really challenging. It's so easy for misinformation, disinformation, and intentional misrepresentations to get out there. One bright spot was the Pope's strong endorsement of COVID-19 vaccination. He went beyond saying that we should accept the vaccine by saying it was the responsibility of people to get vaccinated. I was quite happy to see that because there has been religious opposition in some quarters to the COVID-19 vaccines.