December 8, 2021
MMS/DPH Call Summary and Q & A

On December 8, 2021, the Massachusetts Medical Society (MMS) held its last scheduled informational call for members with the Massachusetts Department of Public Health (DPH). Kevin Cranston, MDiv, Assistant Commissioner and Director, Bureau of Infectious Disease and Laboratory Sciences, 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 of DPH’s Office of Preparedness and Emergency Management participated. DPH officials provided updates and answered questions about the latest surge in COVID-19 cases and hospitalizations, the Omicron variant, pediatric vaccination efforts, and COVID-19 therapeutics. DPH officials also responded to member questions asked during the call. Future calls will be scheduled should circumstances warrant.

**COVID-19 Case Update**

Dr. Madoff:

- Massachusetts is in the midst of another COVID-19 surge. Case numbers are bad and looking worse. To date, the current surge is of the Delta variant.
- The Omicron variant here in Massachusetts. DPH has reported one case of the Omicron variant. How the Omicron variant will impact the current surge or future case numbers remains to be seen. Omicron was worrisome from the outset based on what was seen in South Africa and Botswana. Omicron spread rapidly there and largely replaced Delta creating a new surge. South Africa is different than the United States (U.S.) and different than Massachusetts, therefore we don’t know yet how things will play out. We have a much more vaccinated population which is a positive.
- Massachusetts is about to cross the 5 million vaccination threshold in less than a year. 5 million people are fully vaccinated and almost a million and a half of people in Massachusetts have already gotten a booster dose, which is impressive. The rollout to children aged 5-11 is proceeding apace. DPH remains hopeful that Massachusetts’ high vaccination rates will blunt the effects that we’re seeing now from the Delta surge and from the Omicron variant entering our population.
- DPH is seeing fewer COVID-19 hospitalizations than in the past with similar numbers of COVID-19 cases and believes that is attributable to widespread vaccination. Similarly, DPH is not seeing nearly as many deaths. Massachusetts breakthrough data and national breakthrough data show that the rate of COVID-19 in vaccinated individuals is several fold lower than in unvaccinated, and certainly hospitalizations and deaths are much rarer among vaccinated individuals.
- The experimental data on the Omicron variant is quite limited. Pfizer put out data by press release today, suggesting that, while neutralizing antibody titers to people who are vaccinated with the primary series of Pfizer were far lower for Omicron than for the Wuhan virus (the original virus), a
booster dose appears to bring that level of neutralizing antibody, back to the levels seen with the original virus. So, there is maybe some cause for optimism there with booster doses. However, those studies are preliminary, and we don't know how many subjects were involved and we hope to learn more soon.

Dr. Brown:

- Massachusetts daily case average is 3,300 with a percent positivity rate approaching 5%. Above 97% are Delta.
- There are several factors contributing to the latest surge. These include not having as many people vaccinated as we could, vaccines are not 100% effective, people are not utilizing non-pharmaceutical interventions like masking and social distancing and staying home when they're sick, and it's winter, which is when respiratory viruses circulate. It is important to continue to encourage vaccination and booster shots.
- There are more unknowns than there are knowns about the Omicron variant. It is important to note that South Africa was at end of its Delta surge when Omicron took over. Surveillance for variants, both nationally and in Massachusetts is much more sophisticated than complete at this time than it was even when we were anticipating Delta. A lot of work has been done to stand up sequencing. In Massachusetts, about 30% of our cases are sequenced routinely, which is actually a very high proportion of cases. In the last month for which data were available, Massachusetts sequenced the third largest number of cases. Only California and Minnesota had sequenced more. The CDC estimates that the current national surveillance program for variants is capable of detecting any variant that occurs at least a 0.1% level, and we are sequencing at a higher rate than what is occurring nationally. It is clear through surveillance that we are seeing very early evidence of Omicron in U.S. In Massachusetts, in addition to the one confirmed Omicron case, there are others that are suspect. Exactly what the trajectory of the Omicron variant is going to be is something we will have to wait and see.
- Massachusetts is going through changes in both case surveillance and case follow-up:
  - The Contract Tracing Collaborative (CTC) which has been assisting local boards of health with case investigation and contact tracing since April of 2020 is winding down and their work will essentially be complete by the end of the year. The sunsetting of the CTC has provided DPH an opportunity to think strategically about what the current public health needs are in terms of responding to individual cases. Individual case investigation and contact tracing of all contacts is really no longer our primary public health priority. It is now a completely different situation. There are so many people who are vaccinated and who are not advised to quarantine following an exposure. We know so much more about COVID-19 at this point than we did back when the CTC was first stood up. All of the case investigation and contact tracing that occurred has given DPH the information that we have today about what settings are most likely to lead to transmission and how the virus behaves.
  - DPH is in currently shifting our processes and messaging around what people can expect following a diagnosis of COVID-19. Not all of them are going to get a call from a case investigator, and not everybody who is a contact is going to get a call. The focus will now shift to the vulnerable and also some priority settings. For instance, long-term care facilities and hospital facilities as well as K through 12 schools will continue to be a priority settings because we want to help keep kids in school as much as possible.
o  DPH is also doing increased outreach to promote Mass Notify, the smartphone-based exposure notification tool. There are some materials that we will be sharing with the Massachusetts Medical Society leadership that you can provide to your patients to encourage them to enable Mass Notify on their phone.

COVID-19 Therapeutics Update
Dr. Madoff:

•  On the therapeutics front, there are mutations in the Omicron variant that occur at most of the sites where our current therapeutic monoclonal antibodies bind. Again, we don't know a lot about what this will look like clinically or even experimentally. But there is one preliminary report showing preservation of binding of Sotrovimab, the third monoclonal antibody product that was most recently released and is available as a therapeutic against Omicron.

•  DPH is emphasizing the availability of the monoclonal antibody therapeutics (mAb). They are really one of the few tools that we have for fighting COVID-19 and the current Delta surge. Monoclonal antibodies are lifesaving and prevent hospitalizations and serious outcomes. DPH encourages their use as much as possible. The state has recently opened three new infusion sites around the state providing capacity for an extra 500 courses per week. DPH continues to try to stand up additional monoclonal antibody capacity.

•  The long-acting monoclonal antibody product produced by AstraZeneca is expected to receive Emergency Use Authorization (EUA) soon. This product is the first product intended for pre-exposure prophylaxis in immunocompromised individuals. It is a long-acting monoclonal antibody combination that is administered intramuscularly and is expected to provide protection in patients who can't mount an immune response to vaccination. It's expected to provide protection for up to six months, possibly longer.

•  DPH also expects the availability of molnupiravir, the first of hopefully several orally available antiviral agents. Molnupiravir is a nucleoside analog drug that in preliminary trials in patients who have mild to moderate COVID-19 disease, showed about a 30% reduction in severe outcomes in unvaccinated patients where the product was delivered within five days of diagnosis. That product also should be available in the state soon, and DPH is working on how best to deploy that therapeutic since there will be limited quantities available initially.

COVID-19 Vaccination Update
Mr. Cranston:

•  December 14th will mark the one year anniversary of the first doses of COVID-19 vaccine being administered in the U.S.. December 15th will be the anniversary of the first dose administered in Massachusetts. Massachusetts is rapidly approaching 5 million individuals fully vaccinated in Massachusetts.

•  DPH is particularly focused on vaccinating the pediatric population. As of last week, over 30% of the eligible pediatric population is vaccinated. Massachusetts is second only to Vermont in the proportion of individuals in the 5 to 11-year-old age group that have begun their vaccination series.

•  DPH’s Vaccine Provider Bulletin this week will include some additional trusted resources to share with your patients including a new video from Dr. Franny Polanco Walters from Boston Children’s Hospital available in English and in Spanish.

•  Also in the Vaccine Provider Bulletin is information about the long awaited gray top Pfizer-BioNTech formulation that will be available mid to late December. This is only for the age 12 and up indication.
The gray top formation has certain advantages. One, it comes in a smaller 300 dose trays. The formulation supplied in a multiple dose vial, and it does not require a diluent. It also has a longer refrigerated lifespan. It can be refrigerated up to 10 weeks and also has a longer after first puncture indication. You can use it for up to 12 hours after first puncture even at room temperature.

- DPH encourages everyone who has been fully vaccinated to seek out their time eligible booster as soon as they are eligible.
- DPH continues to work within our vaccine equity communities to deliver trusted information to help address specific historical trauma or real time concerns around vaccination safety and efficacy and support vaccination through our mobile providers and our vaccine equity partnerships with community based organizations, community health centers, and faith based organizations.

**COVID-19 Hospitalization Update**

Ms. Milesky:

- Massachusetts is seeing a continuing trend of increased hospitalizations. Today, an additional 53 COVID-19 hospitalizations brings us over the 1,200 mark for hospitalizations. In the last week, there's been a 32% increase in COVID-19 hospitalizations, and over the last month, that increase has been 117%.
- Hospital occupancy is at 91.4%, which represents a current inpatient census of 9,288. Our health care system is a very, very constrained. It is not all because of COVID-19. We don't necessarily have a shortage of beds, but a shortage of health care personnel to staff those beds. This is what is really limiting hospital capacity. When we compare the number of staffed beds we had a year ago during the winter surge, we are down by about 500 in total, 300 med-surg beds and 200 ICU beds.
- DPH issued a communication just before the Thanksgiving holiday escalating all hospital regions to tier four of DPH's resurgence plan. That means that the hospitals in each of the regions are meeting regularly. There is extensive load balancing occurring to move and help balance hospitals both within and outside of regions. At the same time that escalation occurred, [DPH issued a public health order and guidance](#) in an effort to optimize staff bed capacity. The order requires that as of November 29th, hospitals and hospital systems not meeting a 15% capacity threshold are required to limit non-essential and non-urgent scheduled procedures by 30%. The order states that, where feasible, hospitals and systems redeploy those staff to areas of greatest need, and that included staff who are no longer performing those non-essential or non-urgent procedures.

**Responses to questions provided in advance of the call:**

**Question:** What is the Commonwealth and the federal government planning as far as promoting/providing at home testing? Will DPH collect data on self-reported results?

**Dr. Brown:** There's been an increase in the uptake of and use of over-the-counter home test. Those results are not reportable directly to the states. President Biden has committed to providing testing over-the-counter home tests and increasing the availability for people in different jurisdictions. Massachusetts expects to be included in this national effort with more details coming soon. DPH is in the process of updating our webpages to make sure that we have information about at-home testing in many different languages so that people can understand when and how they should use these home tests, what they should do with the results, how should they isolate, when and how to notify their close contacts, and when to talk to their provider.
Question: Is the state collaborating with schools and/or community organizations to provide pediatric vaccination clinics?

Mr. Cranston: Schools are pretty much up to their eyeballs managing COVID-19 surveillance testing as well as the normal work that school nurses perform addressing the health care needs of kids in school. Schools that operate school based clinics have been partners in pediatric vaccines, but most of those are located at the older grade level. Some of those schools are serving as host communities for our pop-up vaccination clinics. Pop-up clinics remain available to communities throughout the Commonwealth. A number of museums, senior centers, YMCAs, YWCAs, supermarkets, community centers and programs have served as host sites for our mobile pop-up clinic. These can be done on a one time basis, a periodic basis, once a month, or on a regular cadence. Simply go to our website if you have a community site, particularly geared towards pediatric population, older populations, or special populations that you feel have lower vaccination rates. DPH welcomes opportunities to bring vaccine near and close to where people live. The mobile clinics come fully stocked with staffing to manage the entire process.

Question: Is DPH considering restricting elective procedures further?

Ms. Milesky: We are watching the numbers very closely. We are working hand in hand with our colleagues at the Executive Office of Health and Human Services and with our colleagues at the Massachusetts Health and Hospital Association and tracking the data and the constraints on the system. There are not currently decisions made, but it is something that we are tracking and contemplating on a regular basis.

Question: What is the role of waste water surveillance and what does it mean?

Dr. Brown: Wastewater surveillance at a community level, at a municipality level, can be really useful in flagging what is likely to be an increase in cases in the very short term. It has also been pretty good at telling us when the cases might start to decline, but again, it doesn't give you a lot of warning. We're talking about maybe a week. One of the things that we have seen is that individual buildings like apartment building or a long-term care facility are using wastewater surveillance, and it is much harder to interpret those data. We have seen what seemed to be alarmingly high levels of COVID-19 in wastewater from individual buildings and then when testing of the entire populace of the building was done, it only showed one case. So, I think we have yet to understand what the utility of wastewater surveillance is at the facility or building level, but it has certainly been a nice additional epidemiologic tool at the municipality level.

DPH responses to questions asked during the call:

Question: Is there a big demand for booster vaccines and is there any difficulty with people getting appointments for those?

Mr. Cranston: Demand remains robust, and the pace of booster vaccination is high, but there is still a long way to go in terms of fully meeting the booster need. The challenges are much more with regard to appointment availability. Particularly around the holiday there appeared to have been quite a push to get their booster doses, and we’re also entering the period when the largest number of people become eligible on the six month mark because April was the period when most folks receive their vaccine so the six month mark peaks around the December holidays. It is not surprising that the demand is greater at this time. There are challenges with the number of appointments available in pharmacies, health centers, and other vaccination efforts. I do want to add to that, that we have recently changed our approach to the in-home vaccination program. Just this week, we started with a new high-capacity vendor who is providing comprehensive service
of call center scheduling and delivering of all the at-home vaccines for elders and folks with physical or psychological disabilities, who have greater difficulty accessing vaccines in the community.

**Question:** Realizing how complex things are, we have an introduction of new variant, why are isolation and quarantine not implemented to reduce burden of disease - apart from the civil rights concerns?

**Dr. Brown:** There are a couple of reasons why, unfortunately, that approach doesn't work. One is that identification of whether or not a particular person is carrying a particular variant is not timely. The person has to get tested. They get the results. The result or the sample then goes for sequencing, and it takes 7 to 14 days for that to even happen. So, by that time, the person is already out of isolation. If we could identify the variants immediately, and if it was possible to apply really rigorous isolation and quarantine (which I'll say is never going to happen because we just don't get good compliance) when you have a respiratory virus and there is a component of aerosol transmission associated with it, it is still unlikely to be effective.

**Question:** There are people now in infectious disease and epidemiology who are saying that at six months immunity is gone virtually, and there's a little push for advocating getting the booster sooner, not necessarily in immunosuppressed people, but overall, in general, and that giving it at five months certainly would assure a better immune response. Any comments about that shorter interval?

**Dr. Madoff:** Certainly, the six month mark is somewhat arbitrary and a lot of this has been defined by the way studies were laid out. We will continue to learn more when we see how things unfold. There's no magic to the 6 month date. We may learn in the future that earlier than six months is beneficial, or it may be that the primary series should be three doses spaced more closely than having a booster at six months, but I just don't know the answer to those questions. Right now, there are no data to support intervals other than the six months (the CDC recommendation). We just need to wait for more information on that. I don't think that I would in general recommend booster doses for someone at less than six months from their primary series at this point. It would not be in accordance with ACIP recommendations to do so.

**Question:** Regarding the counting of the days from which the determination is made as to whether the monoclonal antibodies can be administered? Is day one the day the patient first feels symptoms no matter what time of day that was or does day one end 24 hours after their symptoms onset?

**Dr. Madoff:** The EUA is a fairly firm approach to who should get monoclonal antibodies. First, you have to be mild to moderately symptomatic. You are meant to be at increased risk for progression to severe illness. There are a number of criteria that are laid out in the EUA. It's pretty broad in terms of age and co-morbidities and body mass index, even mild obesity - BMI greater than 25 is considered an indication. The time frame is limited to 10 days from symptom onset or positive test, whichever is earlier in this situation. This should be applied with clinical judgment in some situations. I will mention that any viral test (antigen or PCR) is adequate to give someone monoclonal antibody in that setting. I will note that the earlier, the better should be our guiding principle here. So, although the EUA extends out to 10 days, a lot of the initial trials that were done with monoclonal antibodies used three days to show the benefit and just all of our principles of treatment and the use of antiviral agents would suggest that the earlier in the course of illness that they are used, the better. I'll also note that for the oral antivirals, the window is even shorter - five days. and we expect that that's what the EUA is going to say for those agents.

**Question:** There are rumors going around about certain requirements that I've heard about in recent days including that you need to be a resident of Massachusetts, you need to show an ID, you need to be a resident
of this country and there are patients who are concerned about experiencing obstacles. Can you clarify who is eligible to receive boosters in our state?

Dr. Madoff: Our rules about eligibility are pretty broad and what we say is that you need to work, live, or study in Massachusetts. I think, our intent is not to provide vaccines for people who visit here or to potential vaccine tourists. That being said, you're correct, no identification, insurance, or other proof of identity is required. You're not required to show your vaccination records or have money. How that is operationalized can differ in some facilities. Some providers may differ from that, but we are pretty firm in that not requiring proof of insurance identity or residences is required.