May 7th MMS /DPH Call: DPH Update and Summary of Q & A

On May 7, the MMS hosted its seventh COVID-19 conference call for physicians with the Massachusetts Department of Public Health (DPH). Dr. Larry Madoff, Medical Director of the DPH’s Bureau of Infectious Disease and Laboratory Sciences and Kerin Milesky, Director of DPH’s Office of Preparedness and Emergency Management, participated. Member questions to DPH officials were both submitted in advance and answered during the call.

Dr. Madoff provided an update on COVID-19 cases in the Commonwealth:

- The COVID-19 Daily Dashboard is updated on the mass.gov website every day around 4:00 PM. It offers case and testing data, hospitalizations, health care capacity, race-ethnicity data, cumulative case numbers, and trends over time.
- On May 7, DPH reported 1,696 new cases, for a total of 73,721 cases in the Commonwealth. Massachusetts continues to lead on testing- fifth in the nation with more than 351,632 tests performed. There are now 35 different sites that are available to do tests. All of them report via laboratory reporting to the Department of Public Health. There have been 4,552 deaths to date from COVID in Massachusetts.
- Massachusetts is still very much in the fight against COVID-19. There has yet to be a symmetrical decline. DPH is not seeing a decline as fast as the rise that occurred with the onset. There are some downward trends in both cases and hospitalizations, and there has been a steady decline in the percentage of positive tests, which is an optimistic and encouraging sign, but Massachusetts is not out of the woods right now.
- DPH priorities:
  - Obtaining personal protective equipment.
  - Reinforcing the importance of social distancing. The Governor’s mask order is now in effect. Wearing a face covering is not an excuse to ignore the recommendation to keep 6 feet apart from others.
  - Supporting the COVID-19 Community Tracing Collaborative
  - Assisting the Commonwealth’s most vulnerable residents

Ms. Milesky provided an update on PPE resources in the Commonwealth:

- DPH recognizes the expanded needs for personal protective equipment in the state.
- A particular strain right now is around gowns. There is very limited supply in the state, and in most cases, when DPH is receiving requests through their resource unit, they need to fill the order with coveralls, so if physicians, hospitals, or group practices are requesting gowns from the state, they may receive coveralls. DPH is actively working to source gowns within their resource units, both through requests to the federal government, and also through procurement. There are a number of businesses and industries around the state and around the nation that are pivoting their work right now and
moving towards producing gowns. DPH is hopeful that in the future, there will be an easing of that scarcity.

- This week DPH posted new information on the PPE web page for COVID-19 around KN95 masks. DPH FAQ on KN95s has been updated with additional information as well as additional testing results, conducted by MIT, on the KN95 masks available in the DPH warehouse,
- In facilitating orders that go to health care providers, DPH is only sending and providing masks that have greater than a 90% filtration ratio. It is then left to each individual practice or facility to decide on whether they believe that's adequate or not. Each of the MIT test results are available on the website, and individuals are encouraged to review that material if you use KN95s from DPH.

**DPH officials’ responses to questions the MMS submitted to DPH in advance of the call.**

**Question:** What is the role of the newly announced 7 Northeast state collaborative as far as PPE procurement?

**Ms. Milesky:** The Governor's office is working directly on that collaborative. It is in its very early days. At this point, we are hopeful that having the buying power of seven states will increase the availability of PPE, but I don't have a lot of additional information at this point.

**Question:** Please comment on the surge and capacity in Massachusetts?

**Dr. Madoff:** The models have indicated that we are past our peak, that we are on the decline, and that our social distancing measures do appear to be having an influence. The markers that we look at are case numbers, hospitalizations, which are down, and ICU occupancy, which is down. As I indicated earlier, we did have adequate capacity, even at the peak. Fortunately, we did not need to invoke crisis standards of care or turn people away from health care. There was adequate capacity, thanks to all of your efforts.

**Question:** Could you clarify what our actual testing capacity is, and whether we should from a state-wide perspective, be trying to test everyone now that we are reasonably sure have COVID, to try to get our case numbers right, or should we continue to limit testing of people with mild cases?

**Dr. Madoff:** I think we're at the point now where we can provide tests to the vast majority of people who have symptoms of COVID-19. I think it is a reasonable goal to test to help us track cases, to understand what's going on with people, and to be able to offer them prognosis and warnings about their condition. I think it is reasonable for us to try to test even those with mild cases. This is a clinical judgment question, and one that I know that you, as able clinicians, can grapple with. Today we got back results of over 11,000 tests, and on Sunday, some of our peak days, we've gotten considerably more than that back. So, there is testing capacity at this point. Some of the issues that we're dealing with are not the tests, but the equipment to test, the PPE needed to do testing, and those issues rather than the tests per se. We are increasingly able to meet that demand. We don't know, of course, if there could be additional constraints, but we are getting help from our federal partners, and we're hoping to be able to bring on some changes to the testing that may make it easier. For example, we're looking at the ability to look at saliva rather than a swab and looking at the ability to use an anterior nasal swab rather than as nasopharyngeal swab, which would make collection simpler and perhaps require less PPE as we move forward.

**Question:** Please clarify where COVID test results are sent? Are all tests results sent back to the ordering provider, state DPH, and the local board of health in the town or city where the patient resides?

**Dr. Madoff:** COVID tests, all of the virologic tests, should be returned to the provider, at least that's our goal, and that's how a laboratory that's operating under CLIA (Clinical Laboratory Improvement Amendments) would work. There are some rare exceptions to that. For example, when you're doing facility wide testing, sometimes the results go back to the facility or a single provider that the facility has named for that collection, and it's done by the National Guard or by Fallon Ambulance, for example. The overwhelming majority, almost all of the tests, should be returned to the provider, and are also reported to DPH through electronic lab
The local board of health is informed through the Maven system and can look at results for the residents through the Maven.

**Question:** Are all COVID + cases in the Commonwealth being traced through the Contract Tracing Collaborative, what is the current role of the local boards of health?

**Dr Madoff:** The way that it operates now is that the local board of health essentially gets first dibs on a case and can choose to do contact tracing on any resident. There are some local boards of health who've elected to retain all of their cases, and they can do so. The default is that if a local board of health doesn't elect to trace a particular contact, it goes directly to the Contact Tracing Collaborative (CTC), and their folks do the contact tracing directly.

**Question:** What can physicians do to help support the work of the Contact Tracing Collaborative?

**Dr Madoff:** Normally, the work of the Contact Tracing Collaborative (CTC) is directly to the patients. Obviously, physicians can help by informing their patients that they may be contacted by the CTC; and to please, please respond to CTC phone calls. That's so important that people answer the CTC calls. On occasion, either the local board of health or the CTC will reach out to providers to try to find additional information about a patient. If they are in contact with a patient, know they're positive, and have let them know that they should be isolating, and that their contacts should quarantine. There's information on our website about, and instructions for, isolation and quarantine, and that's another way that providers can help-by speeding up the process of isolation and quarantine. The CTC is becoming quicker and quicker.

**Question:** With regard to resuming non-essential health care in the Commonwealth, what are the recommendations?

**Dr Madoff:** Unfortunately, I don't know the answer to this yet. This is something that the Governor’s Reopening Advisory Board is addressing directly, and they will be coming back with guidance. All of us believe that health care, non-essential health care/less essential health care will begin to resume early in the first phases of reopening, but I'm just going to have to ask you all to stay tuned regarding that.

**Question:** We have heard from DPH that there are concerns regarding antibody testing (accuracy and interpretation of result) and that viral tests can be positive even after isolation discontinuation criteria are met. With that in mind what does DPH see as the role for testing with regard to decisions about reopening businesses and services in the state?

**Dr. Madoff:** Let me start with antibody testing. As I've mentioned on this call before, there are a huge variety of antibody tests that are available commercially. I think the FDA, having seen the problems with restricting the ability to bring viral testing on board, sort of opened up the floodgates to antibody testing, and there are a lot of, frankly, bad tests that are available out there commercially. The FDA has tried to rein that in a little bit in recent days and is requiring now validation for many of these tests (many of these tests were not validated in any way). It’s also important to remember that even a test that has pretty good performance characteristics is still going to give both false positive and false negative results, and that's especially true with antibody testing, and especially true as we move through a steep epidemic curve and where the prevalence in different situations can be vastly different. Even a test that has a 95% specificity in a low prevalence situation many positive tests are going to be falsely positive, and so that's important to know. Many experts think, that currently antibody testing has a role in epidemiology, in understanding perhaps whether a patient has had COVID-19 disease when a viral test is no longer positive, but I would say that the clinical indications for this test at this point are rare, and I would urge us not to embark on a lot of testing where we're not clear what the result means. One particular caution I want to raise is that a positive test shouldn't mean that somebody assumes they're immune. That's information that we just don't have yet. We don't even yet know how antibody levels correlate with neutralizing antibodies, which is also a laboratory parameter. We don't know about the role of cell-mediated immunity in COVID-19, and so I think it would be very premature to let
somebody know that they are safer, or immune, because they have a COVID-19 antibody. Similarly, the absence of an antibody could still mean that someone is actively infected and incubating the disease, or even symptomatic with the disease. It takes time during the course of the illness to develop antibody. There are, of course, false negatives even in people who we know have had the disease, where the antibody test is negative. So, I just again want to caution us against using it, and we don’t yet know what the role of serology or viral testing is going to be in reopening. I can envision a time when we test people prior to entry into a health care setting or into a nursing home, if and when we have rapid, easily available tests. That’s something we may see, but again, I don’t think we're there yet, and I think much of this remains to be seen.

**Question:** On May 3, the CDC released updated its guidance on Symptom-Based Strategy to Discontinue Isolation for Persons with COVID-19 and Discontinuation of Isolation for Persons with COVID-19 Not in Healthcare Settings. Please outline the criteria changes the CDC made to the symptom-based discontinuation strategy?

**Dr Madoff:** I think the CDC recognized how confusing the guidance was and how confused the general public and many providers and public health people were by their guidance. There is an attempt here by CDC to simplify it somewhat. There are still two sets of criteria for release from isolation: a symptom-based strategy and a testing-based strategy. The symptom based strategy, which in the past, had differed for health care workers and essential workers, and the general population, has now been standardized on a 10-3 basic algorithm, which says that someone can be released from isolation and is no longer considered infectious after 10 days from their symptom onset, or their date of initial testing, and at least the last three days of that period have to be free of fever (without antipyretics), and with an improvement in other symptoms. So, at the end of that minimum 10-day period, someone can be released from isolation and considered non-infectious. If you look at the CDC website, they have embellished it with some data supporting that decision including epidemiologic data that shows that people after that time point no longer transmit to others. There really haven’t been cases where people who have been shown to recover from COVID-19 have transmitted to others, even when they have PCR detectable RNA in their secretions. I think this guidance is reasonable and prudent and is adequate for us to operate on. The CDC has also offered a test-based strategy, and the test-based strategy requires the person to be asymptomatic and then to have two sequential PCRs greater than 24 hours apart that are negative. used to express a preference for the testing-based strategy in certain situations, and the revised guidance as of May 3, and CDC no longer expresses a preference. DPH agrees with this guidance and that’s what we have promulgated.

**Question:** In light of the Commonwealth’s mask order when social distancing is not possible, does DPH have disposable mask reuse recommendations or cloth mask cleaning guidance for residents?

**Dr Madoff:** In the health care setting, there is guidance around reuse of masks. Obviously, under ideal conditions, and when PPE is readily available, we would never recommend reusing disposable PPE. It is under conditions where the PPE material isn’t available that reuse is permitted under certain circumstances. I am going to defer on trying to answer that, because I'll get it wrong, but there is guidance that’s available. Much of the guidance is on our website, and we can help you with it by calling our epi line at 617-983-6800. We do not have particular cleaning guidance on reusable cloth face masks just yet. If a mask becomes wet or saturated or soiled, it should be laundered, and we ask that the material that’s used for masks be washable, and that it should be washed. We don’t have specific washing instructions. Soap and water, laundry detergent, are certainly adequate for cleaning of cloth face coverings, but there isn’t a specific period of time or required laundering that’s part of the mask guidance at this point.

**Question:** We have received concerns about residents and staff of group homes licensed by the Department of Developmental Services (DDS). There appears to be a high prevalence of COVID-19 among both residents and staff and often the residents of these group homes have intellectual disability with behaviors that often lead them to have difficulty with hygiene, may resist wearing a mask, and may resist cooperating with social
distancing efforts. Frequently the staff work in multiple group homes and often have multiple jobs (might also work in other human service positions, such as another agency's group homes, or in Skilled Nursing Facilities or even hospitals). Are these homes being managed similarly to the hospitals and nursing facilities that require staff to wear masks (and perhaps other PPE) at all times, to be screened and/or tested. Is DPH looking into what's happening at these group homes and what efforts are underway to curtail the spread of the virus?

Dr Madoff: We certainly recognize all those challenges. The answer is yes. We do require staff and, when possible, residents in these facilities to wear masks, and under certain circumstances other PPE as well. We don't currently have a recommendation on screening in these facilities, but The National Guard program and our other screening programs are being expanded, and we hope to bring in more types of facilities into this program. Stay tuned for that. Obviously, any symptomatic resident of a group home should be tested, and when symptomatic, should not be working with their staff member. We certainly are available to work with facilities. Our staff in the epidemiology program at DPH actively works with congregate settings-all sorts of health care institutions, group homes, nursing homes, elderly housing, and other kinds of congregate settings, to work on individual situations and we really prioritize those types of situations. I would urge anyone that is working with one of these group homes to reach out directly to DPH through 617-983-6800, and we can work on that individual situation. I know that DDS also has put out guidance that tries to cover a lot of these issues, and that guidance should be available to staff at group homes as well.

DPH officials’ responses to questions the MMS received from physicians during the call:

Question: Harvard Global Health Institute did a study and what their modeling suggested was that we should be doing something along the lines of testing everybody who had symptoms plus their contacts, and that would be about 10 people per person; and be testing enough such that only less than 10% of our tests were positive. That suggests a number of tests around 60,000 to 160,000 a day, which is much, much higher than we are accomplishing. So, the question is, do we have a strategy to get ourselves there, or is there thoughts from the DPH on that sort of approach?

Dr. Madoff: Thanks for the question. These are questions that we grapple with every day, both at DPH and the Command Center, and the Secretary's Office. Secretary Sudders along with the Governor's office has set what I think is a probably achievable goal of about 35,000 tests a day for the Commonwealth. You're right, there's a range of models and expectations, and ideas about who and how to test. In my mind there certainly are situations where we would, if we had ready cheap, rapid tests, might choose to test asymptomatic people on a more frequent basis. I think we all recognize that there's a limitation to testing asymptomatic people, in that it represents only a point in time, and that someone who tests asymptomatic today could be positive tomorrow, and so it raises the question that you could get to the point where you're testing 7 million residents of the Commonwealth every day, which I don't think would be a wise use of resources. Somewhere in between no testing and that number there's probably a reasonable level. I personally think that if we could test symptomatic people, and if we could test contacts of people who are positive, either by clinical or laboratory grounds that is helpful. By the way, one of the things that we found in the contact tracing initiative, probably because of social distancing measures in place, that the average number of contacts to a symptomatic individual has been closer to two rather than 10 as we expected, and so that helps, and hopefully we can begin to test contacts that are traced in that way. Then there are other settings, as we've seen indicated, maybe routine testing at some regular interval in congregate settings or high-risk vulnerable settings, maybe testing in health care facilities. I believe that that's been instituted. For example, all individuals entering into some hospital systems are tested routinely on admission. So, there are some situations where we are testing asymptomatic individuals. There are different estimates of how many people to test, and how often you should test. At some point, costs -both the cost of testing itself and the final cost of the time and effort that goes into testing and the PPE that goes into testing become important, and you have to weigh other priorities. I'm not fully answering your question, but I hope that gives at least my views on it.
**Question:** My question is also related to modeling and is related also to antibody testing. There have been media reports that the coronavirus was possibly or likely circulating both in the United States and in Europe much earlier than we originally thought, based on the case in Santa Clara, California, and in case I read about in France. If that’s true, that would have been before people were distancing, so they may have had more contacts. What might that mean for modeling going forward in terms of projections, and would it have implications for the role of antibody testing? Related to that, there was an article today, about people's "I think I had it" it is. People who had flu symptoms in January or February and think they might have had COVID-19. They may be going to their physicians and asking about that or asking to be tested. What kind of advice would you give to their physicians in terms of antibody testing, mostly to help understand the prevalence, but also to help the position to know what to do with their patients?

**Dr. Madoff:** I’m certainly interested in models, and have seen a lot of models, but I am not a modeler. Models are useful, but they aren’t always true, and we need to understand that. Yes, there are models that show that circulation may have been happening in greater number than we know about, and I think that’s a reasonable thing to think about. We are making some efforts to go back in time and look at antibodies to see whether there were antibodies that may be able to tell us whether there was circulation here earlier than we knew about, and that may be a way of addressing some of those questions. How that feeds into the models going forward and does that change our estimates of the transmission dynamics and so forth? As you and I know, there's so much research that comes out on this topic, as well as things like articles in the Washington Post or the New York Times, that it’s really hard to keep up with. We need to appreciate that some of this will become clearer in retrospect and more data will become available. Looking at things like antibodies over time, as we look at banked blood, banked serum and hoping that those kinds of questions will be more answerable, not just through mathematical models, but through biological data. The question about the antibody testing. I think you're right. A lot of people are going to their providers and asking for antibody tests with exactly the question that you have in mind-did I have this in the past? That is something that providers are going to have to work through with their patients-is that something that we need to know? We had a bad flu season this year. We know that from our flu testing. There were many thousands of flu cases, so a lot of people who had a flu-like illness in December, January, February had the flu, and knowing that they did or didn't have a COVID antibody without understanding its relation to immunity may or may not be helpful. I do worry about a false sense of security, that people will get from positive antibody results- I don't need to wear a mask, or I don't need to worry about caring for a contact, not needing PPE for a health care worker, and so I think there is a risk to testing. An argument could also be made to defer testing to a point where we have better tests and can more reliably say this is a good test that correlates with neutralizing antibody or immunity.

**Question:** I have two questions. Number one-what is the process for getting patients transferred back if they've been going to the hospital, from the nursing home setting, and then were sent to rehab? What test/requirements do they have to meet in order to get back to the nursing home setting? My second question is, has any thought been given to waiving the requirement for physician referral for COVID-19 testing? It does represent a bit of a barrier to care, and because it can place an onus on the physician who finds it difficult to get that referral into the patient.

**Dr. Madoff:** Let me try to answer the second question. Yes, there has been consideration to the idea of having more widely available testing. For example, in commercial settings, or in pharmacies, or in these drive-through sites, some of which don't require physician referral for first responders and others. It has been made available. There has been discussion of that, but I'll say it's not definitive at this point. The whole referral process is more complicated than I can hope to understand. To your first question, you are right. As patients travel from a skilled nursing facility to acute care facilities, to long term acute hospitals, to dialysis units, and so forth, there's a whole host of issues that arise. It is my hope that patients are not denied acceptance to any facility based on testing status, and that facilities should probably assume that anybody coming into that facility could be infected, and quarantine them appropriately on admission. Remember, I talked about 10 days for release from isolation, quarantine remains 14 days, because that's the outer limit of incubation of COVID-
19. I would hope that people aren't required to be cleared to be transferred to the appropriate level of care. That's our goal. There are some rules around this. I'm not going to try to pretend that I completely understand them and I'm not going to try to answer that from a regulatory standpoint, but from a humane point of view, and from an optimizing patient care standpoint, my sense is that patients shouldn't be blocked from the appropriate level of care based on recovery from COVID-19. Certainly, it is prudent that those people within facilities use either the symptom based or test based strategies for release from isolation and reintegration with the general population. We've established a norm around recovery phases for people in certain facilities where people who've recovered are no longer infectious from COVID-19, but may be medically fragile from COVID, can remain apart from the rest of the community for a period of time, even after release from isolation. If there are individual questions around this, please reach out to us.