MASSACHUSETTS MEDICAL SOCIETY

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April 30th MMS /DPH Call: DPH Update and Summary of Q & A

On April 30, the MMS hosted its sixth 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 on COVID-19 testing and contact tracing, treatment, and where Massachusetts stands with regard to resuming non-essential health care were submitted to DPH in advance.

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

- DPH is committed to transparency and sharing the facts and data surrounding the pandemic.
- The enhanced COVID-19 Daily Dashboard is posted to 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. Massachusetts has one of the most comprehensive daily reports in the country.
- As of April 29, DPH reported 1.963 new cases, for a total of 60,265 cases in the Commonwealth. Massachusetts continues to lead on testing- fifth in the nation, first in per capita testing, with more than 265,000 new tests done to date by 35 laboratories, including the Massachusetts State Public Health Lab, a variety of hospital laboratories and commercial laboratories. Sadly, there have been more than 3,405 deaths to date from COVID in Massachusetts.
- Massachusetts is in the midst of the expected surge here in Massachusetts.
- Governor Baker announced his Reopening Advisory Board this week. Commissioner Bharel is a member of the advisory board and will ensure that public health, safety, and medical priorities are among the foremost priorities.
- DPH priorities:
    - A top priority continues to be responding to equipment and other needs of our public health partners in the field. DPH continues to do what they can to obtain and distribute personal protective equipment. Their teams are working around the clock to procure this gear and bring in additional health care workers as well.
    - Visits to the emergency department for non-COVID cases have decreased. People with serious medical conditions, strokes and MIs are not calling 9-1-1 and delaying going to the hospital for care. This is concerning. DPH is emphasizing that Massachusetts' has the capacity to treat non-COVID patients in the and people should seek the care they need as they normally would.
    - Social distancing and keeping 6 feet apart from others remains important to slowing the spread of the virus.
    - The COVID-19 Community Tracing Collaborative partnership with DPH, local boards of health, and Partners in Health has begun. The goal is to support confirmed cases and reach out to their contacts. This partnership is being seen as a national model and is critical in limiting potential spread.

- DPH continues to focus on our most vulnerable residents. On April 29, Governor Baker announced a second round of funding of up to $130 million to support nursing facilities during COVID-19 as well as increasing funding of $44 million for residential congregate care service providers. This funding will support staffing, and infection control, and PPE costs.

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

- Since DPH's initial delivery of resources from the Strategic National Stockpile, the resource unit and warehouse have pushed out just under 1,600 deliveries of PPE for health care providers across the state including deliveries for hospitals, long-term care facilities, community health centers, EMS, and individual physicians' practices.
- DPH has provided 665 ventilators to acute care hospitals across the state through the process that Commissioner Bharel set up with the Ventilator Working Group. DPH is actively monitoring the situation at hospitals across the state and stands ready to deploy additional ventilators, should they become necessary.
- There are still constrictions on the vendor supply chain in the state. DPH is working on two paths to be able to meet resource requests. One is through requests made to federal partners. DPH expects to have some shipments of gowns coming into the state, which is wonderful news because there is an exceedingly limited supplies in the state stockpile. The other path is through aggressive procurement and DPH is working with colleagues in their procurement office to be able to source various types of PPE.
- DPH is now seeing some loosening of the supply chain, particularly among hospitals across the state that are seeing some supplies coming into their facilities. DPH encourages everyone to continue to pursue aggressive sourcing with vendors for supplies.
- DPH's resource unit is making efforts to fulfill the smaller PPE requests that they are receiving from individual clinicians and private practices.
- There is a significant shortage of NIOSH-approved N95 masks. In that instance, it is appropriate to use a KN95 mask in its place. Recognizing the shortage and the availability of KN95 masks, DPH posted a KN95 FAQ document that provides additional information and resources for individuals who are interested in learning more about these masks and the protections they provide. DPH has independently been working with MIT to analyze each of the mask shipments that have come into the state stockpiles so that we can understand the level of protection that they provide. Information on KN95 respirator test results is also posted.

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

Question: *Does DPH have any specific guidance for pediatric practices, recognizing that routine pediatric care has been postponed and that many children may be behind in their immunizations and other important pediatric assessments?*
Dr. Madoff: This has really been a sad aspect of COVID-19. As a strong advocate for childhood immunization myself, and of course, DPH is strongly committed and works with you all and with the Massachsuetts Chapter of the American Academy of Pediatrics (AAP) among many others with the goal of complete immunization of our kids within the state. But, we have seen, unfortunately, a decrease in demand for vaccines that come into DPH. There is guidance that's been issued by AAP, by CDC, and by others, trying to address this and stressing that pediatric immunization is not optional, and really needs to be done. I encourage you all too, in your practices, and to encourage your patients not to let immunizations lag. It's really important as are other aspects of pediatric primary care, assessments and so forth, that need to be done. All I can say is that we in

the immunization program are working with our partners at AAP and others to drive home this message that pediatric immunizations really need to continue.

Question: *Please comment on the information regarding use of Remdesivir to treat patients?*
Dr. Madoff: This is exciting, but I need to remain somewhat guarded in my approach to this.
For me, personally, it evokes memories of when I was a house officer during the early days of the HIV epidemic, and AZT first became available. It was, of course, really exciting to see that there was the possibility of an effective therapy. Of course, we knew at the time and learned quickly that AZT was not curative, and it was really only a little bit of an assistance in managing HIV, but it was so important in recognizing that there was therapy. I view remdesivir as similar to that. There were two recent clinical trials released. First, a Chinese trial that really showed no statistically significant benefit of remdesivir, and perhaps because it was a small trial. There were rigorous endpoints, and there was no clear clinical benefit seen in that trial, which has been posted in The Lancet. On the other hand, we've heard but not actually seen the data or at least, I haven't seen the data at this point, of an NIAID-sponsored randomized controlled trial, which did reach statistically significant endpoints and showed a benefit in duration of infection in the remdesivir arm. It's really the first trial to show a clinically significant benefit of any therapy for COVID-19. So, it's a really exciting milestone.
I suspect that the FDA will act quickly if they haven't already. Again, I haven't had a chance to see Twitter today or look at the headlines in the news, but I suspect that that will happen quickly, and remdesivir will become available for therapy, at least under certain conditions. While I think it is very exciting, I have to be a little bit measured in the excitement. It's clearly not curative. The endpoints were the modest improvement, but the fact that there is improvement; that there's something to offer and that it shows that there is, at least, the possibility of working forward from this and understanding, perhaps, how better to use the drug, whether it would work with other agents, and other questions that these trials open up.

Question: *Are there any new/notable clinical manifestations among, or interventions for, COVID-19 positive patients that physicians should be on the lookout for?*
Dr. Madoff: With every remark I make on COVID-19 I am struck by how much we learn every day and the volume of new information that becomes available. Helen Branswell, the STAT reporter, compared it to trying to get water from Niagara Falls with a water glass. It's really a daunting task to keep up with what's new every day. One thing, to go back to the pediatric population for a minute, that's been of concern was first noted by a pediatric intensive care group in the United Kingdom (UK). They noted clusters of severe inflammatory syndromes, not unlike toxic shock syndrome or Kawasaki that we're seeing in the UK. Now, the background of this is that COVID-19, the serious manifestations of COVID-19 remain rare in pediatric groups. Here in Massachusetts, in the US, or anywhere in the world are not seeing, for the most part, children being severely affected with the disease. Of course, there are some and I think that this syndrome, which has now been seen at least by anecdotal record in a number of countries, including ours, is of concern and something to be on the lookout for. I don't pretend to be an expert on this, but it does appear to be, at least temporarily and perhaps, really linked to COVID-19, and is something to be aware of. One other group of phenomenon that has been increasingly linked to COVID-19 have been thromboembolic complications. I think that's been fairly consistently noted that at least the idea of cytokine storm, dysregulated immune phenomenon. Of course, these phenomena are closely linked to the clotting cascade and elevated D-dimer is something that is noted fairly early, along with inflammatory markers. Also increasingly noted have been the incidence of stroke, myocardial infarction, and some unusual peripheral manifestations of embolic phenomenon in digits and skin, perhaps linked to unusual skin manifestations of COVID-19. This is something I think it's still an area of active investigation and that I feel like we all need to learn more about -likely we will in coming days.

As we see millions of cases of a new disease entity, of course, unusual manifestations become more apparent. I think what we're seeing now is some of the unusual manifestations of in what is unfortunately, an all too common disease are becoming apparent to us.

Question: *Return to work guidance and contact tracing for patients with suspected Covid-19 who didn't qualify for testing. Is there anything to be done about this group or is the plan just to go forward hoping that more patients will have access to testing soon?*
Dr. Madoff: I would emphasize that clinicians are able to test. There's nothing that prohibits a clinician from testing someone who they suspect of having COVID-19, regardless of the clinical scenario. So, this testing is available, and we would encourage testing for a number of reasons, because it helps us track cases, and because it obviously clinches a diagnosis when the testing is positive. For whatever reason, there are people who are clinically diagnosed with COVID-19 and not tested. It's, of course, up to a clinician to determine a diagnosis with a patient and if a patient has some classic symptoms, or even some of the classic symptoms and findings of COVID-19, radiologic findings or some of the unusual manifestations like anosmia, dysgeusia that have been described with COVID-19, it's important to note that and to let the patient know that this is a likely diagnosis, both for their own knowledge, and also, so that they can be isolated appropriately and their contacts quarantined. The Council of State and Territorial Epidemiologists and the Centers for Disease Control, (CDC), have defined case criteria for COVID-19. Clinical criteria, along with an epidemiologic link, are adequate for defining a probable case of COVID-19 from a public health perspective and certainly can be reported, and should be reported, to the local board of health. They can work with you on the issue of isolation, contact tracing, and quarantining of contacts in that situation. So, it isn't 100% necessary to have a laboratory test. Now, if there is a laboratory test done, and that test is positive, that does enter our electronic laboratory reporting system. It does get reported directly to public health, both the local board of health and to the Massachusetts Department of Public Health. I believe, as of yesterday, cases are automatically referred to the Contact Tracing Collaborative. This effort that I mentioned earlier is for all potential contacts. So, unless the local board of health decides to take on a case, and they will do that in certain towns and in certain circumstances, then automatically, that case will flow to the contract Contact Tracing Collaborative and will be worked on through that group. That won't apply, necessarily, to patients who were diagnosed clinically, but those can still be reported to the local board of health and the local board of health can intervene appropriately. It can work with us at DPH to do so.

Question: *Since many people may be infected with COVID-19, but asymptomatic, does DPH plan to/would it make sense to allocate a portion of our diagnostic resources towards those who do not exhibit signs of infection? Since there is no treatment, if asymptomatic patients are less likely to social distance or self-isolate (compared to those with symptoms) wouldn't providing information to asymptomatic patients on whether they are infected be helpful in mitigating disease transmission?*
Dr Madoff: How to manage testing of asymptomatic individuals is an ongoing question throughout this outbreak. This is an area that we are working on actively. As you know, we have worked with the Commonwealth of Massachusetts' Command Center to test in nursing homes widely and that testing included some symptomatic patients, of course, but also, asymptomatic individuals in those congregate settings, and staff members as well, who may or may not be symptomatic. There already is ongoing testing of asymptomatic individuals in that setting. In some other congregate settings, for example, in homeless shelters, testing of all individuals has been done. I think, arguably, that it is the setting that makes the most sense for testing of asymptomatic individuals because there's an action that would be taken on the basis of that. Those individuals would be isolated or cohorted with others who are either symptomatic or known to have COVID, and therefore doing so limits the amount of transmission. As I've said before on these calls, you need to

interpret this test cautiously. When positive, it's highly specific, but when negative, it doesn't indicate that that person is uninfected or isn't about to develop infection. We know that an exposed individual can develop symptoms at an average of five days, but really, as far out as two weeks, therefore if you test somebody three days or five days after they've been exposed they may well test negative, but still be incubating. We've seen this on many occasions where someone who tests negative develops the illness and becomes symptomatic, and clearly is shedding the virus shortly after testing negative. I think, unfortunately, there's a tendency of someone to get a test and say I'm negative, breathe a sigh of relief, and become unconcerned if they develop symptoms. That is a cautionary note that I want to send about testing of asymptomatic individuals.
Now, who else to test asymptomatically is tougher to figure out. It's certainly an area that we're thinking hard about and trying to figure out how best to strategize around testing asymptomatic individuals. Would it make sense, for example, if there was a rapid point of care diagnostic to test people at entry to the health care setting, or, as some institutions are doing, test all inpatients in an institution in an effort to prioritize isolation and protective equipment? Those are some of the considerations. Of course, some testing sites are making testing of asymptomatic individuals widely available, regardless of whether the person has symptoms based on a desire to be tested. Again, here I really would caution us to not over interpret a negative result.
Similarly, positive viral tests can be misleading as well. We know that people who are positive have their highest viral load at the time of symptom onset and we also know that virologic testing by this very sensitive RTPCR assay can continue for an average of a couple of weeks, and in some cases, many weeks after resolution of symptoms and development of immunity. A positive test also needs to be interpreted with a grain of salt in an asymptomatic individual. This could be someone who, in fact, is recovered from the disease, and just still has traces of virus that are detectable in their nose.

Question: *With regard to resuming non-essential health care in the Commonwealth, what public health data and guidance does DPH anticipate will be needed/helpful inform reopening?*
Dr Madoff: DPH has been involved in developing criteria from public health and health care standpoint around when it will be safe to relax some of the social distancing measures that we've instituted, and we've all been a part of. Broadly these measures include a decrease in the number of cases, declining hospitalizations, declining numbers of deaths, lowered rate of positive tests, despite increased testing. All of these will be signs that our distancing measures are working and that we're past the peak of this infection. When those markers are clearly declining and have declined to a manageable number that's going to be one indication. Another important measure, and the reason for the social distancing measures and everything we've been doing to try to flatten the curve, is health care capacity. We don't want to relax our guard prematurely when the health care system is so strained. We are fortunate in Massachusetts that we have a strong health care system, that we have good access to health care, and that our health care institutions have managed admirably under what has been a tremendous strain. We haven't had to invoke crisis standards of care, for example, or turn people away from ICUs, or have limitations on our ventilator capacity. But I think that's still a risk and something we don't want to ever see happen. So, we want to have clear benchmarks that our health care system is in good shape and is back to a baseline where we can begin to have routine health care activities before we relax our social distancing measures and reopen. Of course, reopening will be gradual. We're not going to completely eliminate many of the measures that are in place for some time to come, maybe not until there's a vaccine available.

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

Question: *Are there guidelines that the DPH is planning to publish regarding reopening of health care offices including guidance on social distancing, types of masks to be used, supply of PPE, until we transition through this world of COVID that we're living in at the present time?*

Dr. Madoff: The short answer is yes. We will be issuing guidance. This is an effort that brings together many parts of government. DPH will be working with many others to try to establish that. We recognize that health care, the less emergent, non-COVID aspects of health care, are extremely important. We want to move towards opening them with appropriate safeguards in place as quickly as possible..

Question: *This question is for Dr. Madoff. It regards some epidemiology of racial and ethnic data in the state. I keep on checking the data on the website. And it keeps on showing 56% unknown for racial data. Do you know when this information will be available? And I'm also curious as to what caused this not to be available from the beginning.?*
Dr. Madoff: This is something that is extremely important to DPH. Frankly, not just about COVID, but around all of the information that we track. At a most basic level, our data come from providers, largely and is only as complete as the data that we get. When someone is tested for COVID, or any illness, itis typically the provider that actually gives the race ethnicity data, which is often based on a self-assessment by the patient of their racial-ethnic identification. The reason for the high level of unknown/ missing data is that it's not reported. This becomes an issue when testing is done in a nontraditional way, not through a provider's office or a health care facility, for example by the National Guard at a nursing home, or testing is done at a drive-through testing site or urgent care center. Settings like that may offer less complete data. That is really where it stems from. We are making efforts, and have made efforts, to try to improve the completeness of those data. We were even hesitant to release data when so much of it is missing. We recognize that there is potential error introduced in releasing data when there's so much of it is missing. I appreciate the question. It's something that we also are very concerned about and would like to see improve.

Question: C*an we declare that the Boston hospitals near the epicenter, MGH, Brigham and Women's, and Boston Medical Center, and elsewhere are safe places and that you can still go to the emergency room if you're sick or have a problem?*
Dr. Madoff: Thank you for that comment. The governor and others have made this comment forcefully. The chiefs of Boston area hospitals have spoken specifically too- urging people who have reasons to be at the emergency room to undoubtedly go to the emergency room. I told my sister with her potentially fractured back, it was a fractured clavicle, that of course she needed to go to the emergency room, and that the risks of going to the emergency room were largely theoretical while the risks of not getting appropriate medical treatment are quite real. We have made that point quite forcefully and I absolutely agree.

Question: *My question concerns health services and how we're going to provide for the increasing number of people on unemployment. Usually, their health insurance is related to their workplace. So, are we expecting greater utilization of emergency rooms or possibly greater access to free health clinics for people, very large numbers of people, who are now uninsured?*
Dr. Madoff: It's a very good question and I think it's an appropriate concern. That is something that I don't feel qualified to answer, but I will take up that question and try to get back to Dr. Bombaugh about it. Dr. Bombaugh, do you, perhaps, have comments on that?
Dr. Bombaugh: I don't have an exact answer on that. My clinical work is in a community health center. We are anticipating a 30% to 40% increase in our MassHealth patients. I think many of our patients will need to utilize other means by which to have health insurance. We are definitely seeing, and are planning for, an increase in our MassHealth patients, forward into the fall. You are right. A lot of change is going to be happening. We will take a deeper look at this and be able to hopefully get back with you, or certainly find out this information over time.

Question: *I have two questions. First, would it be possible to include statistics on health care workers who've been infected, hospitalized, died, or recovered? The second question is do Massachusetts mortality numbers include presumptive cases, as well as laboratory documented deaths?.*
Dr. Madoff: Thanks for the question. I'll answer the second question first. Our numbers currently only include laboratory confirmed cases. We know, of course, from experience with many other diseases that that's not a complete count. That raises the importance of serologic testing on a population level to try to better figure out what the actual case numbers and people who are asymptomatically infected, or who have symptoms but are never tested. We know some of those through people reporting them to local health, but we certainly don't have a complete answer to that. On the health care worker question, institutions, through their occupational health programs, are often more immediately and completely aware of the health care workers that develop COVID. When we get a positive case and we're able to contact that case, we can find out if they're a health care worker. We do not track down the many negative cases that we get. We do have some data on health care workers who infected, but I would say it's incomplete and so we've been hesitant to provide that information. Also, as you know, the definition of health care worker is quite broad and includes a number of people that work in the health care setting. As long as they work in a health care setting and have contact or potential contact with patients, they're considered health care workers. It's a pretty large percentage of our population. I know it's not a particularly satisfying answer.

Question: *My question is about people who have come successfully through intubation and/or the ICU. Has the DPH began to think about how we are going to do rehabilitation for uninsured people how it would be paid for; or for people who came from congregate living, where they'll go, what standards we will use to bring people back to full function, either in the workforce or in their lives?*
Dr. Madoff: It's an excellent question. I would say it's not unique to COVID. It would apply regardless of the underlying disease that causes a severe illness and an ICU stay. We are fortunate in Massachusetts to have pretty good coverage by health insurance. Upwards of 95%, 97%, of people in the state are adequately insured. My expectation is that, regardless of insurance source, it would support rehabilitation. I think that's certainly important. Certainly, Medicare and other federally funded insurers cover that kind of rehabilitation as well. There are gaps and I think that's something that we need to address. At the moment, we're so immersed in the acute situation that we're probably paying less attention to that aspect than we should. But it's a good comment and one that's worth keeping attuned to.
Follow-up: My concern is for those people who previously had insurance, but don't now. I think the burden will be higher and the worry about whether people are immune or still infectious will remain and be problematic.
Dr. Madoff: I appreciate it and I share your concerns.