October 7, 2020 MMS /DPH Call: DPH Update and Summary of Q & A

On October 7, the MMS hosted its 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, Susan Lett, MD, MPH, Medical Director, Immunization Division, and Kerin Milesky, Director, Office of Preparedness and Emergency Management participated in the discussion. MMS member questions for DPH officials were submitted in advance as well as answered during the call.

Dr. Lett provided an update on DPH’s influenza immunization efforts.
This year it is more important than any other year to make sure that we vaccinate as many people for flu as we can. It will reduce the stress on the health care system, protect those in the highest risk group and reduce the need for diagnostic testing. Physicians and patients should be aware that there may be a longer wait time than usual for vaccination due to physical and social distancing in clinics and in offices. Additionally, people may have to seek out and go to different places to get vaccinated than in the past. For example, if they usually are vaccinated at their workplace, that may not be available, and they may need to be vaccinated elsewhere.

It is also very important to keep vaccinating for influenza beyond November this season. While there has been a reduced flu activity in the Southern Hemisphere and in the United States, we’ve had inter-season low numbers of tests that are positive. Experts are unsure of how the flu season and the COVID season are going to align since they are both circulating simultaneously. We all need to continue reinforcing all the public health measures with regard to social distancing and COVID precautions as well as work to get our influenza immunization rate up as high as possible in Massachusetts and across the country. The CDC has worked with the US vaccine manufacturers to have 190 million doses this year, which is 20 million more than last year. We are hopeful that will align with the demand and I want to ask you, as physicians, to keep up the work in vaccinating your patients.

DPH has developed an influenza vaccination communication campaign to spread the word that influenza immunization is the best way to prevent spread and to protect yourself and your family. It's a very important campaign based on focus group research and DPH is looking forward to implementing and promoting the campaign with our partners, including MMS.

DPH is implementing a policy in long term care facilities that removes one of the forms of declination that was previously allowed in long term care facilities for staff. Staff will only be able to decline flu vaccination because of a medical or religious exemption not for personal belief or philosophical reasons.

Dr. Madoff and Ms. Milesky then provided responses to questions received in advance of the call.

Question: What is the status of DPH’s Crisis Standards of Care (CSC) planning?
Ms. Milesky: Work has continued over the last several weeks on revisions to the CSC planning guidance. Late this summer, the Commissioner reconvened the Advisory Committee for CSC. She brought back the initial planning team and added additional experts on health and racial equity and disability issues to review the
Question: Many physicians are concerned about the increase in positive cases. Please provide DPH’s thoughts on the recent MA positivity rate uptick and moving forward with reopening in light of this trend.

Dr. Madoff: The number of cases is among many parameters that we look at every day in terms of what's going on with COVID activity in the state. It is our hope that this is a blip, and this is not a harbinger of a second wave, a second surge. But it is always foremost in our mind that that could be happening. Let me just step back for a minute and say that we're now doing more testing in Massachusetts than any other state. That is, of course, in part due to our higher education partners and their use of a lot of surveillance testing in higher education communities. The good news is that there have not been many cases here associated with higher education in what could have been a tinderbox. So far, and fingers are crossed, it has not been as much of a problem as we might have anticipated with the influx from around the country of hundreds of thousands of students into the state. So far things have been contained. The same with K through 12 kids going back to both daycare and schools. There have not been many cases associated with either of those. Whether small amounts of activity in those settings could be contributing to a slight increase in cases, I think is hard to say. The cases that we're seeing are highly varied. They range from health care associated to cluster associated. All nature of clusters are included—private parties and other kinds of social gatherings, businesses and restaurants, and all kinds of places where we're seeing small numbers in each of these settings. Of course, it's the small numbers of clusters taken together that do add up. The very high volume of testing that's going on in the state at this point is contributing to increased numbers. Our percent test positivity rate has stayed quite low at just over 1%. It's going up a little bit from a couple of weeks ago when it was down below 1%. But it still stayed quite low. However, it is clear that we're seeing more cases and it is clear that we're seeing an increase in hospitalizations. These are things that we are keeping a close eye on and monitor every day.

Question: What are rapid antigen tests best used for and what are the main concerns?

Dr. Madoff: I think that the jury is out on the utility of antigen testing. We are learning more about these tests all the time. We have seen both false positives and false negatives with antigen testing. If you use a test, even with a pretty high specificity, very low prevalence population, the likelihood of a positive test being a false positive is unfortunately high and that's what we're seeing. That's one issue with antigen tests. They are also known not to be as sensitive. They don't detect the virus as easily as the RT-PRC test. That can be both a blessing and a curse. The thought is that the positive antigen tests correlate with high levels of virus, which may be associated with transmissibility and with actual disease. On the other hand, they may miss cases early
in the course of illness, which is a negative. On the positive side, they also miss these cases we see with persistent test positivity-- so the RT-PRC that can be positive for weeks following an illness. We know that this RT-PRC does not correlate with transmissibility or even the ability to culture a virus from these individuals. It's pretty clear that, at least in immunocompetent individuals, that a week or 10 days after onset of illness and positive testing that the detection of a culturable virus ceases. The antibody develops and these individuals are not likely to be shedding virus beyond that initial period. It may be that antigen tests will turn out to be useful in that sense, in being able to identify individuals who are truly infected and are able to transmit virus, but I really think we don't know enough yet to be able to use these tests. Our current guidance asks that the antigen tests be confirmed by a PCR. One way that the antigen testing can be useful is in quickly identifying someone who's positive. That gets to another question that I was asked about the turnaround time. In the couple of days between the test being obtained and the result, it would be great to know someone who is truly positive and be able to isolate and contact trace them. In the setting of a symptomatic individual who tests positive by any of the available rapid diagnostic tests, I think it's fair to presume them positive and act accordingly. I think that's the setting where I see them as most useful, is in being able to rapidly identify, isolate, and contact trace cases, in particular symptomatic individuals.

**Question:** What is the current turnaround time for RT-PCR tests?

**Dr. Madoff:** The current turnaround time for PCR testing is under two days in Massachusetts, which is good news. We do a lot of our testing in the state and that helps. Even the out-of-state testing has improved in turnaround time.

**Question:** Do we know any more about the nature of COVID immunity and how long it may last?

**Dr. Madoff:** We know almost nothing honestly at this point. I think it's a great question and one that I hope we learn more about. I don't think we know beyond the sense that people who have recovered are likely to be immune for some period of time. How long that is, we just don't know. There are increasingly reported cases of reinfection, but they're still rare, but they're well documented now. For people beyond six months I think all bets are off just because there just haven't been that many people that we know about beyond six months who have been in a setting to be reinfected.

**Question:** What is the anticipated impact of flu season and colder weather on COVID transmission and hospitalization rates? Are the field hospitals ready to be stood-up again if needed?

**Dr. Madoff:** Our surge planners are definitely looking at the deployment of ancillary field capacity for managing patients, perhaps those who don't need an acute care hospital. Those conversations are underway. We are working on multiple channels around surge planning at DPH, other parts of state government and at the Command Center. What is going to happen? I don't know. In other parts of the world, there's been less flu because of the social distancing and mask wearing. That's certainly our hope. High levels of vaccination and the use of social distancing and masking will reduce flu.

**Question:** With regard to the numerous reports of congregating high school and college students, what is DPH seeing as far as case severity, and transmission rates and does DPH have any recommendations on how to improve compliance?

**Dr. Madoff:** I mentioned earlier that while we are seeing these instances, by and large they have not resulted in large numbers of cases. That's encouraging. In general, I think our colleges and universities have been very good about testing and promoting social distancing in their students and they are really doing the best that they can in a challenging population.

DPH officials’ responses to questions the MMS received from physicians during the call:
**Question:** My question is about the clinical interpretation and the implications of testing. The case is of a college athlete who was living in an off-campus apartment. Three of her roommates were positive, two with mild symptoms on September 1. This individual has remained asymptomatic, had six screening tests done by the Broad Institute from mid-September to the end of September and also had an antibody test on September 28, which was positive. On October 4, this individual was positive with a RT-PCR and, on the basis of that, has been isolated. The cycle threshold for that test was 39.07. I understand that Broad has its cycle threshold cut off at 40, some others at 37. The CDC median suggests maybe 33 is a better number. Would you be willing to comment on how clinicians should interpret tests for people who are asymptomatic, who are having them done for surveillance?

**Dr. Madoff:** There are a lot of possible answers. I think the scenario you're describing sounds most compatible with someone who had COVID a long time ago. You're finding a positive test now barely at the limit of detection and that most likely represents someone who's had an infection a couple of months ago and is now immune. In this particular scenario, you might be able to interpret it that way. From a public health standpoint, we're reluctant to discard a positive test and might still suggest quarantining or isolating that individual for 10 days despite what I've just said about what I think is going on clinically. This is a cautionary approach, in that setting, but I agree that cycle thresholds approaching 40 or certainly greater than 33 are likely to represent a very low level and not transmissible virus.