Cambridge
Public Health
Department

Cambridge COVID-19 Expert Advisory Panel

Thursday, October 29, 2020

Attendees:
Bill Hanage
Jill Crittenden
Louann Bruno-Murtha
Chris Kreis
Kirby Erlandson
Sam Lipson
Nancy Riham-Porter
Jose Wendell
Barry Keppard

Meeting convened at 1:00 pm

Data and Clinical Update

- Lou Ann: At hospital, case load is up. Running 15-20 patients over past two weeks, but number is stable. The majority are on medical floor but 5 are now in the ICU which is a bit concerning. Preparing internally for another surge. Interested in BioBot data.
- Bill: Trouble making sense of MWRA sewage data. Spoke to Eric about how to interpret the data. Undeniably indicates more transmission, but size is uncertain, and we may see it come down a bit. One reason the sewage levels are similar to peak in Spring may be that cases were massively under detected in spring. Frustrating that sewage titers are being used to justify school closures but not for other public health interventions. Looking at similar data from Netherlands sewage—Netherlands sewer data also same levels as spring and they are having to send patients to Germany because hospitalizations increasing so quickly. Hard to know how much sewage titers will result in increased hospitalization, because hospitalization requirement will depend upon age distribution of these new infections.
- Sam: Too early in technology development for city to make statements about what will and will not be done based on sewage numbers.
- Bill: Can use the data we see now as indicator that we need to check PPE supply levels. It is showing us direction of change, but not necessarily quantity of change, especially because we don't know which age groups are being infected.
- Nancy: Rate increase of positives has increased in Cambridge significantly in recent weeks. Planning to ramp up testing in Cambridge starting Sunday. Changing

platform for scheduling appointments and including scannable QR code to improve access to information for scheduling testing.

- Sam: urge to be more present with mask enforcement – not enforcing mandate with a fine, but need to engage people more directly in conversation when not . Perception that this is the activity of greatest risk because community is anxious about it. What is really pushing transmission may be more related to indoor dining or private gathering. Governor cites lack of evidence to suggest indoor dining is driving transmission.
- Bill: This is frustrating because its impossible to prove any particular thing is responsible for transmission. We have CDC study of 300 people that found 2x as many who tested positive reported indoor dining in the past week. It is a clear unambiguous risk factor for transmission. Furthermore, if you go from 6 to 10 maximum group size in a restaurant, you have quadratic increase in transmission risk. Doubling risk one of them is a super spreader, and also doubling number of people they can transmit it to. Also, focus on closing schools and medical procedures before closing indoor dining is faulty because schools and colonoscopies are more important than indoor dining. Also, CDC recently changed definition of close contact. It makes clear any indoor dining greatly increases number of close contacts not only among people at the table but also people at adjoining tables. Criteria for restaurants may need to be updated in response.
- Sam: article came out today suggesting there may be longer tail of infectivity before symptoms occur, up to 3 weeks. Not majority of cases, but some number of cases. The evidence we have is as good as it gets, can't wait for more evidence to arrive.

Sector reclosure process

- Sam: How to package reclosure, if it is needed? One option would be to go back to phase II, another option would be to pick and choose based on what would have the most impact. Best to put the word out now so that people are aware we're thinking about it. If we do decide to enact some reclosure, would require time to make decision, and we know what one week can do.
- Bill: There has been talk about changing threshold for school closure. If you change school closure criteria from 8 to 15 per 100,000 then you are delaying closing schools by one week. This is the way exponentials work.
- Sam: Pick this up next week

Guests: Dan Cortez, Barry Keppard, Josefine Wendel, Barry Keppard, Karthik Dinakar

- Barry: This is still an experiment to reduce transmission in Chelsea. Considered more continuous testing, which brought to point where they could isolate to a few neighborhoods that would allow sampling to give sufficient information on infection burden in those neighborhoods. Establishing baseline in two of those neighborhoods working with biobot. Getting 5 samples over 1 week period then moving to twice weekly sampling with 24 hour turnaround. Hoping that will provide

framework to know current levels and how many cases are present relative to what testing data is telling us. Setting them up to meet people where they are and provide more services.

- Daniel: Setting up system with individuals in charge of specific zones. 2 areas which are most dense and over crowded. Goal is to develop relationships, especially immigrant community and anyone not connected to city messaging. Partnering with Chelsea Collaboritive, deploying pandemic response team, youth delivering PPE kits, etc. Financial incentives for people who don't want to get tested because they might lose jobs. Created isolation hotel at great cost to city. Delivered food and took care of infected. Many things go into the response. Why are people not wanting to get tested? For many it's not because they don't want to show ID, instead maybe because they don't want posterior NP swab. Need to educate on where the anterior nasal swab/quick antigen/self swab test is available. City has 4 testing sites but amount of testing being done is below prediction. Mobile testing site is open every day in front of city hall has short lines and underutilized because it is the posterior NP swab. Don't have anterior nasal swab yet.
- Sam: How to get results back to people? How are they reporting result?
- Barry: Stop the spread sites are returning results in 24-36 hrs. Hope is to work with state or through other mechanism to secure antigen testing to dedicate to this type of work – screening test they could run on 2x weekly basis in areas where they're not catching enough infections. Then connect people to confirmation with PCR test. Providing buffer so that all of things that would inhibit you from getting tested – trying to mitigate that with financial, food, and isolation resources.
- Karthik: Antigen test needs HCP or CLIA waived lab to administer it. FDA not approving self-administration yet. Must be observed. Antigen doesn't have control to show that you swabbed enough.
- Jill: Even more important with antigen test because they generally don't have control to show that human cells are present whereas PCR test does.
- Barry: if we went mobile to a neighborhood, the antigen would be paired with the PCR. So it wouldn't be home based. If they knew to divert them to PCR it would happen right there.
- Sam: Door to door with observed testing requires large staffing. What are there barriers to people getting that rapid antigen?
- Barry: Barrier with awareness. Do it yourself, not invasive, get result quickly. Thinking about videos to explain these tests and how.
- Sam: Cambridge is somewhat ahead with sewage testing but a lot to think through. City wide, 3 samples. Not doing targeted, but could add if we chose. Cambridge has so many groups doing their own work with their own networks, and need to figure out what role they should play. Is Quality isolation hotel still available?
- Daniel: New hotel close to Chelsea is available to send people there. People did not use hotel at level expected, but it was used. Lower uptake because people weren't interested. There are different ways to do the hotel: one side could be quarantine, one could be isolation. Also rented 3 unit building for housing 3 families. Many people didn't want to be separated from family, many people were fatalistic and

assumed they were already infected. Some people went to other families outside of city.

- Jill: Louann had idea about breadwinners who are not sick go to quarantine at hotel and they want to keep their job.
- Daniel: We had a lot of those situations. It was case by case, would figure out scenario for each family. Sometimes It was a manner of getting the breadwinner out. Sometimes it was taking the entire group out and leaving the infected person there. Sometimes they just said we're toast and stayed together. Now the city is full of veterans. If it happened again, there would be greater participation from residents and more solutions from residents. In the first window everyone was running around like chickens with heads cut off.
- Jill: evidence that people can be reinfected is critical for Chelsea.
- Bill: Difficult to understand how levels of transmission are proceeding without contribution from that cohort who was previously infected.
- Barry: Population estimate Is undercounted (20K minimum) in Chelsea. From data, found 7 day window between symptom reporting and people getting tested. This could be one mechanism to collapse that window.
- Daniel: Assumption is that community will want to participate more this time because of the shock and did not know what the economic loss would be. People are now walking up to city hall and asking for help. Felt the city went above and beyond.
- Sam: Is there a model for community antigen testing that Chelsea might emulate?
- Emulating San Francisco, several months ahead – directly deploying household to household as well as community clinics. Biohub in bay area, somewhat like Broad but more embedded in neighborhoods. Deploying antigen tests as a way to build relationships and identify spread. One thing they did we will emulate is that they started Latino public response network with housing, food, medical categories and showed you which resources were available in your area.

Meet was adjourned at 2:05 pm