



Cambridge
Public Health
Department

Cambridge COVID-19 Expert Advisory Panel

Thursday, December 17, 2020

Meeting convened at 1:04 pm

ATTENDEES:

Panel members

Bill Hanage
Jill Crittenden
Louann Bruno-Murtha
Chris Kreis

CPHD/City Staff

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Sam Lipson
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1) Clinical/case/surveillance update 7-day case averaging of local cases Clinical update

Cambridge and Everett Hospitals are seeing a gradual increase in caseload, which requiring more staff at each hospital. At least 6 COVID patients are currently in intensive care. This is the highest number of COVID patients in the ICU since the spring. One important difference between now and spring is that hospitals are providing much more non-COVID care (community clinics now open, surgeries, immunizations, preventive care). Currently, the need for hospitalization among COVID patients appears less serious than in spring, but hospitals are providing more non-COVID medical services without the staff flexibility we had in spring. Hospitals have not seen a confirmed flu case yet.

COVID Vaccination Update

Cambridge Hospitals started to use Pfizer vaccine on December 16. The shipment was delayed by two days due to the snowstorm. Hospital staff are embracing the COVID vaccine more than anticipated with little negative feedback. Prioritization has been made according to the risk associated with clinical function. State guidance helps hospitals overcome tension among disciplines by establishing clear priorities. Moderna

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is very likely to arrive next week. CHA hospitals (and others) are taking advantage of the extra doses in the vials containing the Pfizer vaccine after rapid CDC and MDPH approvals and extra caution (aseptic transfer techniques). With use of extra vaccine in each vial there is guidance pending to guarantee availability of required second dose for all who received initial dose. The vaccine needs to be administered within 6 hrs once it's prepped.

Moderna has refrigeration 30 day shelf-life, but also only remains effective for 6 hr once it's mixed. Everyone is encouraged to use the CDC app (V-Safe) to track side effects after receiving the shot, but this is optional. 2000 additional Moderna doses anticipated to arrive beginning next week should be sufficient for all 3 categories of CHA hospital staff. The vaccine is not required for staff who have been prioritized, but the acceptance rate in different clinical disciplines is quite high.

Case data and surveillance update

Cambridge's current case rate is about 25 per 100,000. There are 2 deaths reported on December 16, both cases were in their 60s and were hospitalized. Our case count continues to climb up and we are seeing gradually increasing cases in older age groups. More asymptomatic cases among young people. Reviewing past 2 months of case data, we believed the dip in cases a couple weeks ago might be connected to the people quarantining themselves pre-thanksgiving. Currently our data shows a flattening trend in new cases., It seems likely that we will see a similar situation before Christmas (short-term dip before planned gatherings). January might be very challenging after people have gathered during Christmas, despite guidance to avoid such gatherings.

A few older cases were likely associated with multigenerational housing. Partners In Health Community Tracing Collaborative (CTC) are now started to investigate the source of community transmission through a search protocol that includes questions about gathering behavior up to two weeks prior to infection. This might help us understand what situations are driving clusters of new cases. The questionnaire includes mask use questions, but might not specify mask type used. There's another small cluster (2 cases) in a long-term care facility, which is believed to be under control. Every individual is in an isolation room. We should make sure that messaging around Holiday gatherings and in multigenerational housing is very clear and strong.

Sewage surveillance data

Current available data is extremely bouncy, which is consistent with a trend of continuous increased community transmission risk. CPHD staff will discuss the possibility of using a longer sample collection interval (now sampled over 24 hours). To increase stability of the signal. This might not be appropriate, given that the virus degrades quickly and longer sample time could impact measurable virus. The data and other evidence (testing data) also suggest that Cambridge has relatively lower transmission when compared to the Boston North region overall (covering MWRA

service area including Boston, Chelsea, Revere, Winthrop and Middlesex County communities W to Waltham, Newton, NW to Bedford, N to Woburn, Wilmington, Reading).

BioBot data graph now includes error bars, reflecting derived lab method variability. While most of the error bars overlap few of them don't. Mid-Cambridge sample concentration appears to be increase steadily, while other Cambridge catchment areas are quite bouncy. At this point it makes more sense to use geocoded case data (cases by census block) to plan community outreach efforts. However, the general sewage data aligns with community cases rate, both indicating that Cambridge is in a major surge, along with the region overall. There are a few main takeaways:

1. Avoid overinterpreting short-term data (consider that these are weekly samples).
2. Current data are not currently suitable for being used as a primary metric for policy making (this is also the guidance offered by CDC subject-matter experts).
3. Focus on evidence of increasing transmission; dynamic cluster tracing.
4. Consider sewershed testing to be part of long-term surveillance infrastructure providing benefits for identification of future COVID spikes and potentially valuable for several important public health metrics (post-pandemic).
5. Data in each catchment area might be impacted by daily activity among individuals (e.g. How many residents work from home vs travel to work within each catchment area? How much are different catchment areas impacted by daytime-users vs. residents).
6. In general, smaller catchment areas and data collected during a surge are expected to be less stable overall.

2) Indoor fitness gyms/classes (new State rollback vs. proposed Cambridge rules)

State's new rules require indoor mask use at all times without exemption. CPHD and City staff are currently reviewing guidance (or requirements) related other possible mitigation measures including:

- * Flow and management of customers
- * Specification of areas or equipment used by each customer
- * Properly tapped off or isolated equipment (no shifting of open/closed stations)
- * Promotion and encouragement of outdoor fitness activities
- * Specific limits on number of customers using changing rooms at one time
- * Strong encouragement to participate in upcoming IAQ consults being planned for small businesses (outside contract now in development).
- * Prior scheduling of customer appointments
- * Time limit for each customer (as with indoor dining)

3) Regional approach to further local restrictions: where we are now

Update on local regional closure: City Manager is conferring with neighboring cities to further consistent regional policies (weekly meetings). Cambridge has been in Phase 3 step 1 since late July 6, so new State rollbacks to Phase 3 Step 1 have less

impact on Cambridge. New stricter State mask use rules (required at all times in shared indoor workspace) were already adopted by Cambridge in late August. New requirement for mask use by all customers in indoor fitness centers and classes was encouraged in Cambridge, but is now a State requirement. The city is closely monitoring the situation and considering the possibility of moving back to Phase 2, Step 2.

4) CPS metrics

The primary purpose in closing in-person classes among school-aged kids is for schools to avoid becoming a net contributor of transmissions to the community. Children transmit infections back to their households, so surveillance and control of transmissions in schools is very important.

Second, transmissions occurring in school matters much more than the number of isolated cases. Cases in school could come from outside sources, but if the infection is acquired within the school that could affect multiple households. The City, CPHD and CPS need to continue to strongly encourage people (students and teachers) to get tested whenever there's a positive case.

Third, a systematic protocol should be developed or improved to evaluate the safety measures in place and the degree of compliance with existing measures whenever there is a case. Though children are less likely to be infected, when they are infected they are in a prime position to transmit within their households.

There are two distinct phases that should be recognized in making decisions about opening or closing schools: 1) When transmission is low, schools can and should be open as long as the transmission rate can be kept low within schools. 2) When community transmissions are very high and transmissions are not being controlled within schools, students' households need to be protected through remote learning.

Using BioBot sewage data to make decisions about school opening and closing doesn't make sense as a stand-alone metric. If sewage data is used as a metric it should be regional data (not Cambridge-only data) and it should be considered along side case data and specific incidents of transmission within schools. As discussed earlier in this meeting, local sewage data is bouncy and most teachers don't live in Cambridge. In summary, Cambridge Public Schools have substantial mitigation and testing in place and improvements to both should continue to be made. Currently schools are closed until New Year, this is a potential opportunity for ensuring better quarantining over Christmas.

5) Key messages for C3 outreach campaigns, social media: testing, travel, vaccines. Not discussed due to insufficient time.

6) Administrative

After the New Year, the EAP meeting will shift to twice a month schedule.

Adjourned 2:06pm

Notes respectfully submitted by Sam Lipson on December 20, 2020