

June 16, 2020

Cambridge COVID-19 Expert Advisory Panel notes

1) Discussion of questions and topics to be discussed on next week's EAP call with Dr. Lander.

- Follow on testing at Long Term Care facilities in April and May? Is there a retesting plan for later in the Summer or Fall?
- Prioritizing testing within households (Fast Pass or other method) when an individual tests positive.
- Development of shorter swab. For molecular test. Is this working and can it be scaled up to other testing sites?
- Are "tongue swabs" or other less invasive testing methods being considered? I've heard of some test in development using that type of specimen collection.
- Testing strategies for the Fall
- Inquiring about 1-hour assay for home use to increase participation in testing, maybe to address in-family testing needs after a positive test result.

Claude Jacob: Testing results from each Cambridge testing site are now being reported (both Molecular and Antibody/Serological). Overall Cambridge has one of the lowest positivity rates among MA cities (maybe the lowest).

Bill Hanage: I would like to get a good contact for community testing data.

Chris Kreis: After individuals recover from COVID are they still eligible to get tested? YES.

Bill Hanage: MGH found appx. 10% continued to test positive for the virus (Molecular) even when sero-positive.

Claude: To respond to the question about repeat testing at Long-Term Care facilities, the Broad/Cambridge team conducted three rounds of weekly tests before ending that effort.

[note per Nancy Rihan-Porter: Some discussion about the right time and capacity for a return to these facilities for further testing has taken place. Nothing has been decided yet].

Bill Hanage: Perhaps serological (antibody) testing household members would be a workable approach. Needs further consideration and discussion. MGH is undertaking a focused study in Chelsea to look at re-infection after sero-conversion.

2) Overall compliance with public hygiene practices (esp. mas use) appears to be declining.

Jill Crittenden: Some reports from North Point Park of poor compliance with masks order. The second week of the Memorial Drive Sunday closure also suggests less compliance with mask use order and less social distancing.

Claude Jacob: There is a current proposal shut down Memorial Drive between the Eliot Bridge and the River Street on both Saturday and Sunday (11am-7pm) or even all week, though this may not be feasible in any case. There is no current plan to offer masks or have a table set up on Memorial Drive during these times. State Police are the lead agency and there is coordination with the Cambridge Police as well.

Bill Hanage: Messaging to the public about the importance of mask use is difficult but critical. Community transmission is invisible, so the perception at-large that risk is reduced is problematic.

3) Reopening playgrounds, play courts and tot lots

Sam Lipson: There is a current proposal to develop capacity to place “community ambassadors” in many tot lot and playground locations. The ambitious version of this idea would involve coverage of appx 50 sites across the City.

Claude Jacob: This initiative would be time-limited, covering about 8 weeks through July and August. Full coverage would be a major challenge (all day every day in all locations). We have a little time (2 weeks or so) to implement some kind of ambassador plan for playgrounds and tot lots. Are there any major concerns or objections to this idea? **[No objections raised, general support and praise for this idea was communicated by panel members].**

Kezi Cheng: Misuse of masks is widespread. There is definitely a need for more instruction and messaging.

Claude Jacob: “Volunteer” ambassadors (they would be paid) would be trained to provide clear and consistent messaging around proper mask use.

Kezi Cheng: Perhaps a trial run of the ambassador approach in a couple of parks would be helpful in developing a working plan?

Bill Hanage: It’s work thinking through the intended outcome for such a program.

Chris Kreis: If we are looking for some indication of community compliance with mask use and distancing maybe the City could use CCTV feeds?

4) Reopening Schools

Bill Hanage: If we’re looking at the risk picture here (also relevant for consideration of risks posed by school reopening) we need to consider three cohorts that would be affected.

- A) Risk to children as a group
- B) Risk to family members
- C) Risk to the community at-large

Bill Hanage: Let's say (based on published household studies) that children are 50% less likely to transmit to others than adults are. So the **risk overall to children** (compared to adults) is quite low in a classroom setting where mostly kids are present.

On the other hand, **adult caregivers and teachers** are obviously at much **greater risk**. Consider treating teachers with underlying risk factors as a cohort. Perhaps some consideration to this group should be planned, such as prioritizing them for remote teaching assignments, assuming we will have a mix of in-person and remote classrooms.

Risk to communities from kids who are infected are most likely driven by teen behavior. Teens have been shown to be spreaders as a group. The presence of teens in a setting where they are more likely to get an infectious exposure poses greater risk to the community overall, so policies addressing risks to teens should be regarded as having a greater impact on community risk overall.

Testing in schools poses questions about what the purpose of the testing will be and what the response will be. These need to be developed hand-in-hand with any proposed testing regime. So policies and testing programs should focus on teens and younger children separately.

Jill Crittendon: We do know that several countries that have been fairly successful in managing the pandemic risk have used testing to identify early outbreaks: close schools (temporarily), clean, inform, and reopen (Germany, Austria, South Korea).

Claude Jacob: Perhaps there will be some reconsideration of group activities in the reopening plan, such as gym, art, and music classes. And to Bill's point, some sort of cohorting based on underlying risk in considering redeployment of teachers.

Bill Hanage: Related to schools as a transmission risk, Israel found that they had an increased transmission rate a few weeks after reopening. [Sam notes that a study in the Netherlands found that they had avoided a surge in transmission after they reopened schools in at least one district].

Sam Lipson: I think we should discuss a little more about what criteria should be used to make decisions about increasing restrictions to reduce transmission in the community. If we're saying that we are making data-driven decisions, then what data are we using and what criteria or thresholds serve as trigger for various stages of a new set of precautionary measures?

Bill Hanage: We need to consider the following in making decisions like these:

- A)** What is the status of community transmission? How is it trending?
- B)** Data should be used to frame the discussion, but there should also be some flexibility that takes context and consequences into account
- C)** For schools, online learning poses its own risks and barriers that should be considered.

D) In order to be credible and effective we should be developing a plan for response to worsening pandemic risk now. It will be much harder to sell this on the fly if it is not delineated ahead of time.

A few epidemiological facts to keep in mind as we think about how we use data and our knowledge of transmission risks in different groups and different situations to make decisions.

- Consider the number of individuals contacts that occur as a result of a particular activity and the randomness of the individual contacts that occur. The numbers and randomness of student interactions can add ~0.3 to the R_t .
- School buildings should be carefully scrutinized for air exchange and air filtration. **Prof. Joe Allen** at HSPH's Healthy Buildings Institute and **John Doyle** at Harvard Facilities are both content matter experts who might be good resources for the City and the School Department.
- Planning to have fewer cohorts within a school buildings at any one time could also have a risk-reducing effect through less random encounters and more rooms to practice proper distancing.

Adjourned at 3:05 pm