Cambridge COVID-19 Expert Advisory Panel
Tuesday June 2nd, 2020

Jill, Bill, Sam, Kirby, Lou Ann, Chris

Pilot study to systematically test household contacts

- The data collected would provide a measure of secondary attack rate for household contacts and assess feasibility of scaling up such a program
- Would be also be useful for identifying risk factors for transmission, like larger households. Would also be useful to add serology testing. (Bill)
- Systematically testing household contacts requires cooperation from all members of household. Would need to eliminate cost to encourage participation. Also, relying on ambulance service to do mobile testing at senior housing but they don't have unlimited capacity to carry out the testing because it requires them to take workers off normal function. (Sam)
- Would be good to learn more about people who did not participate in senior housing testing (30% of people? Pose question to Nancy?)
- Some people reluctant to have test if positive result means they are required to quarantine. Serology would be incentive to get test. (Lou Ann)
- Could do snowball serosurvey (test contacts and then all the contacts' contacts, etc). Would be helpful for understanding distribution of clinical symptoms are and see if asymptomatics are less likely to transmit than symptomatic. (Bill).
- If Pro EMS can't sustainably carry out the testing, consider looking for additional partners such as new EMS company called Ready Responders. They are operating in other cities doing testing in households. Also, another partnership opportunity to explore is with diagnostic companies who may fund a project like this in order to gather data that validates new diagnostics they are developing. (Kirby)
- Broad finger prick serological assay could be useful – doesn't require phlebotomy. Could propose to work with broad to use their fingerpick assay and do outreach to households with positive (Lou Ann). Bill could bring questions about this to Michael Mina.
- Broad also interested performing testing on already existing samples, if available (Jill)
- Have to bring this suggestion back to clinical personnel (Sam)

Transmission among children and implications for school, daycare

- Advisory group has been meeting for a few weeks looking at logistics of school reopening options
- Bill: Opening schools comes with risk of community transmission. Serological evidence suggesting that high school age children and young adult college age are probably hot beds of transmission.
- Risk is lower for younger children. Even though severity of illness is lower among children, must take into account the risk of children bringing virus into their home environment.
- There is still a lack of data confirming the risk of children transmitting COVID to others. However, there are studies demonstrating they are capable of transmission and likely about half as capable of transmission compared to older age groups. One

challenge is that studies are less likely to identify child as index case since they are less likely to show symptoms, resulting in under-detection of child transmission.

- Important to consider evidence we now have from other countries: modeling using data from China showing closing schools translates into 0.3 decrease in R0. Even Sweden has closed universities and high schools. Israel has had rise in cases associated with outbreaks at 5 middle schools.
- For schools: should discuss staggered attendance, increased distance, and improved sanitation with superintendent. People torn by what options are—should include option that doesn't involve physically going to the school. (Jill)
- Need to expect fall gets bad and it may be that school needs to be closed. Should plan for that now (Bill)
- For daycare: Licensure is done by state. Currently moratorium. Will be required to show they have planned scenarios. Max 12 in a room including staff. There are also family run daycares that do not have regulatory oversight. Sam will bring back more information about daycare reopening. May ask if they are getting visits from state. (Sam)
- Reopening of daycares is opportunity to study degree of transmission (Kirby)
- Potential for testing: Would be very informative to get non-invasive testing (even just serology) for childcare centers, such Peabody terrace. Suggests speaking with Val Nelson who has been involved in setting up testing. Challenge on city's end is that many groups are asking for mobile testing – intense pressure on city. This means additional testing ventures may need to be driven by researchers. Most limited resource is staff. EMS partner had to pull people off their normal functions for mobile testing. Nancy (on EAP) is working with them.

Phase 2 Reopening and anticipating future surge

- Governor allowing phase 2 businesses to come back for activities related to planning phase 2 reopening. Not sure what data they are using to drive reopening decisions.
- Cambridge DPH personnel will be increasingly strained by requests for on-site safety inspection/advising for reopening institutions.
- May have spike in next several weeks (R0 is currently slightly above one) but surveillance probably not strong enough at this point to see the rise for some time. Concerned will see outbreak stemming from places from worship. Large portion of transmission coming from large gatherings.
- Plan to reopen but are there thresholds established – at a certain level scale back. (Chris)
- How do we think ahead? Who can we talk to? How to mitigate it and prepare for future? Who can we bring to future EAP meetings?