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Subject: Testing strategies

Hi everyone!

I know you're all having conversations about if and how testing should be used to determine if students and staff can return to campus. I've had some very detailed discussions with our independent colleges and universities and am now having recurring webinars with those presidents, but I've not had the opportunity to share that guidance with the state-funded universities. I thought I'd send you all a message so you can have a better understanding of why we do not support the idea of mandatory testing prior to returning to campus.

While mandatory testing might FEEL like the right thing to do, it's not. There are several scenarios I can share with you to help illustrate why that's the case:

A COVID-19 PCR test (the one that is a swab that detects the virus) is a snapshot. The results of that test should be interpreted as "the RNA of this virus was/was not **detected** by this test and, therefore, this person is LESS likely to be infected". It doesn't mean the virus isn't there incubating. It doesn't mean there isn't low-level infection. It just means the amount may not have been at the threshold necessary for the test to pick it up.

Incubation of SARS-CoV-2 is thought to be 14 days, and up to 40% of those who are infected are thought to be asymptomatic. An individual can have a negative test during incubation. They can have a positive test during incubation. That positive could be day 3 or day 7 or day 14 of that 14 day period.

Requiring "a negative test" up to 10 days prior to coming to campus isn't helpful in most cases and protects very few people. It gives a false sense of security to families, staff and students.

Allow me to provide a few scenarios for you:

Student A gets a "negative test result" 9 days before move in. What kind of test was it? Was it a test that has FDA Emergency Use Authorization or one that's out there that's total junk with a 50% false negative rate? You have no idea.

But let's say the test is truly negative and this student is absolutely not infected (we don't know that, but let's pretend). Is the student then expected to self-quarantine until coming to school? If not, they could become infected at any time during the next 9 days. In fact, they may even INCREASE their risk of becoming infected by interpreting their negative test as a license to not socially distance or wear a mask. So, in this case, that \$100 test that your school required means nothing, does nothing and protects no one.

Let's say you change that requirement and require a negative test 3 days before coming to campus and let's say the negative is truly negative. If the student was infected one or two days prior to their test, their test can still be negative and they come to school incubating the virus. Additionally, when every college student in the state is required to get a test in the days before coming to campus, the lab systems will be completely swamped. What do you do with the student who got a test 5 days before move in but the results aren't back. What if it takes 14 days to get those results? Can they come to campus or not? If you let them on campus without their results because of lab backlog and then they get a positive result, how do you trace those contacts? Are you prepared to quarantine them on

campus? If you don't let them on campus because their result isn't back but through no fault of their own, the backlash could be significant. And lab specimens degrade over time, so a swab collected but not processed for a week may have an increased chance of being falsely negative than if it had been processed the day after collection. Again, we don't know if we can trust a negative result.

Let's say someone has a positive test 5 days before coming to school. They appropriately isolate for 10 days plus 72h of being well. Do you now require a negative test result before they can come to school (we would not recommend that)? What if they're positive for 2 months? Do they have to stay out of school? We know people can be persistently positive for weeks or months but that doesn't mean they are infectious. Or do you let them come to campus without a negative. Then the student tells his roommate that he didn't have to have a negative test and tested positive 2 weeks ago. Roommate's parents get upset. There's public uproar. Not a good situation.

Let's also look at the cost—While the state is currently picking up the tab, these tests cost approximately \$100 per test. 10,000 students? That's \$1M. 20,000 students? \$2M. Huge sums of money spent on testing that isn't helpful. Sure, you might find a few positives, but you have no idea how many you WON'T find and that's at tremendous cost. In the meantime, these kids are socializing and circulating and exposing themselves anyway. And once they're on campus, then what? Do they stay locked down? Can't go downtown or go home for the weekend? What if they're local? The minute they step outside of the bubble of your campus, they're potentially exposed again. There are commuter students, staff, visitors to campus, all of whom are exposed every day and come back to campus.

We cannot test our way out of this pandemic. Until there's a vaccine, there needs to be universal masking, social distancing, hybrid remote/in-person education, and testing of ill individuals so they can be identified, isolated, and their contacts traced and quarantined.

Here's what I have proposed to the independent colleges and universities:

1. Develop or procure an app that screens students and staff for symptoms every day. If they say they're symptomatic, they get an automatic reply to stay home and contact student health. We use such an app at the State. Complete the questions, get a green check mark on your phone. We have to show that check mark whenever we enter a state building and it only lasts for one day. The following day we have to do it again.
2. Strict policy to wear cloth face coverings when outside of their room or apartment. Check temperatures outside of lecture halls or ask every kid to bring a thermometer and check their own. 100.4 or higher stays home.
3. Always test anyone who is symptomatic and have them self-isolate until the results return.
4. Know what your process is when you have someone who reports symptoms. They get a mask on, call student health and? Go get a test? Where? Stay home and someone comes to test them? What do you do if they're positive? What do you do with the roommate(s)? Where do they isolate if positive (home or on campus)? Where do you quarantine the contacts for the next 14+ days?
5. Do surveillance testing on campus. One fraternity house or one dorm floor at a time. It's controlled, it's ongoing, and it's manageable. You notify the floor that there will be testing on a Thursday afternoon. We assist you with getting self-collection kits (I'm in the process of procuring for this very purpose). Kids swab their noses and stay on the floor for the 48h or so until the tests return. They order in or the university provides meal delivery. Test results return to the kids and they get their own results. Public health also gets the results and notifies you of the positives. Positives are moved to whatever place you've decided to use for isolation. Contacts are quarantined x 14 days. Most of these testing situations will have no positives. Some will have one or two that will have to be dealt with, but it's not thousands of kids at once. These tests are ½ the cost of the other kind and they can do their own collection, so PPE isn't needed. The state is procuring them so there's no cost to you, either. I

don't know if you can make this "mandatory" but since it's a self-test you might get decent participation. This is an ongoing process through the pandemic but is manageable.

6. Offer testing to faculty on a regular basis. They should also test and then self-isolate until results come back. They can self-test on a Friday, tests are sent in for processing and they'd probably have results on Monday.
7. Make testing available to any student who wants it (through a testing site, local HD, or some other arrangement) but don't make it mandatory to return to campus. You can promote it, highly encourage it, but requiring it to come back to campus isn't going to protect your school like you (or your administrators) might think it will.

I hope that's helpful. I'm happy to jump on a call with you if that would help, as well. As I mentioned, I'm doing recurring webinars with the TICUA presidents. I'm happy to set something up for the State-funded schools, as well, if there's interest.

Additionally, we have some resources for higher ed on our website, including table top exercises:

<https://www.tn.gov/health/cedep/ncov/educational-orgs.html>

You are welcome to call or email any time. Please let me know how I can assist. In the event that you move forward with testing on campus, I am also your contact for that and would be happy to walk you through what that process can look like.

Thanks for all you do! I'm working with the school districts, too, and you guys are all in a really tough situation. There are a lot of opinions swirling around that are not based on the science as we understand it. We spend all day, every day, doing very little aside from COVID-19 response. We've learned a lot, but we have a lot more to learn. You don't have to make these decisions alone, and we are happy to assist in any way that would be helpful. Parents are going to be upset no matter what you do—being able to say that the actions you took were informed by the best information available at the moment those decisions needed to be made is probably that best you can hope to do under these extremely uncertain circumstances.

Call or email me any time.

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