

Presenters:

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Hugh Tilson:

Good afternoon, everybody. It is 12:30. Let's get started. Thank you for participating in today's COVID-19 webinar for providers. Today's form is a part of a weekly series of webinars put on by the NC Division of Public health and NC AHEC to discuss recent updates to the states COVID-19 response and to provide an opportunity for you to ask questions of your states' public health leaders. Next slide please.

My name's Hugh Tilson, I will be moderating today's form. Today you will hear from Dr. Megan Davies. She's an epidemiologist in the Communicable Disease branch, and Chanchal Newton, with hospital acquired infections epidemiologist. Next slide.

Before I turn it over to them, I'd like to take a brief moment to thank everybody for taking for making time your busy schedules to participate in today's webinar. Your work is really important, and we hope the information provided today will help you while you do that important work, and will make navigating these trying times a little easier. After today's presenters provide their updates, we'll turn to your questions. We've learned in past forums that presenters will often address your questions during their presentations. We will have time to get to your questions. I encourage you to wait until the presenters are through with their presentation before submitting a question. There are two ways you can submit a question. If you are participating through the webinar function, please click on the Q&A function on the back bar at the bottom of the screen. If you are on the phone, you cannot do that. You will need to email a question to [questionsCOVID19webinar@Gmail.com](mailto:questionsCOVID19webinar@Gmail.com). Please know if for some reason we can't get to your questions we will send them to DPH so they can respond to them. We will record this webinar, and we will make a recording of it and a transcript available soon. Next slide.

I also wanted to let you know we have updated this resource slide. There is a new DHHS website on Coronavirus. I encourage you go to the provider's website that's linked there. Also at the bottom there is a new PPE request form link, and that was just added last night or yesterday. I know requesting PPE is one of the things that frequently arises on this and other calls. There is a new form and process for you to go to so that link is on there as well. Let me now turn it over to Dr. Davies.

Dr. Megan Davies

Good afternoon. My name's Megan Davies and I'm an epidemiologist with the Communicable disease branch of the Division of Public Health in the North Carolina Department of Health and Human Services. First, I want to thank NC AHEC and the other professional societies for bringing us all together for this call today. Most of all I want to thank the healthcare providers on the line for the care you give people in North Carolina all the time, and for the caring you are doing for your patients and your communities at a time when people are stressed and afraid. As clinicians you are very important to your patients in the care you provide, but you're also very important in your communities as people others turn to for information and to get more of a sense of security in a frightening time. We appreciate that you're taking the time to be on this call and get the information you need for the role you play for your patients and your community.

The first thing I would like to do is just run through some numbers. You are probably all familiar with them. It always helps me oriented to the magnitude of this event to run through some of these numbers. In the world, as of the last time I checked the website, there are over 2 million cases worldwide of COVID-19

reported and about 140,000 deaths worldwide. In the United States we have over 630,000 cases and over 31,000 deaths. That is in just about a month's time to put those numbers in perspective. In North Carolina we have over 5,000 lab-confirmed cases, coming on 5,500 and 131 reported deaths. Yesterday we had 450 people, that we knew of, hospitalized in the state for COVID-19. As of yesterday, over 70,000 tests have been run on North Carolina people for COVID-19. Those tests were run at a variety of laboratories. Mostly at commercial laboratories and some at healthcare system laboratories based in the flagship hospitals, and also the state laboratory for public health. There has been an increasing positivity rate on the tests being submitted and most recently it's at about 8% positivity for testing. Almost all of these tests are on symptomatic people as far as we know because the guidelines are focused on having symptomatic people at this time.

So I know everyone is very aware of the issues and barriers to testing that we have all been struggling with in the past few months. I wanted to give you a little bit of an update on the status in North Carolina. We have had more healthcare system labs coming on board with their own PCR tests, so that's increasing our capacity. And I encourage clinicians to check if you are affiliated with a healthcare system, if you haven't received an announcement, check with them and see if they are now providing that test. There is also more capacity at some of the large commercial labs like Lab Corp, and they have improved their turnaround time. We know that there was a very long turnaround time because of backups at the lab in the last week or so. Some of the turnaround times were over a week from the test being submitted. Those have improved and are looking more like 1-3 days now in some of these commercial labs.

All the testing labs that I have mentioned are providing molecular testing of nasopharyngeal swabs, so it's RT-PCR. That's for now the most dependable way of testing for the active presence of a virus in your patients. They are also coming onto the market now, and there is a lot of interest in, antibody tests. So there's a lot of excitement about antibody tests for a couple reasons. One is, it's a different way of testing for the virus, so it doesn't rely on the same supply chain the PCR tests rely on, so hopefully there won't be such a shortage if we have a combination of ways of testing, and hopefully they can open up testing significantly. Some of them are also point-of-care tests that can be done with a finger prick and a capillary tube. That's appealing, also. However, none of these tests are FDA approved. Any test that is being sold at this point is being distributed under an emergency use authorization from the FDA, that does not really require much in terms of proving the test works well.

If you are looking at using any antibody tests I really encourage you to read the package insert for the test performance characteristics of sensitivity and specificity. You can find those on the FDA website if you search around a little bit, if you are looking at using a specific kit in your office or healthcare system. But even if you look at those performance characteristics that are published by the manufacturer, keep in mind that some of these are based on fairly small numbers. They are using blood from maybe 100 patients who were known to have COVID-19 and comparing them to the blood of maybe 200 patients who, for whom the blood was collected before 2019 so they're presumed to not have COVID-19 antibodies. While that is a nice start, it does not give me full confidence that the test results are really telling me if my patient has been exposed to this virus or not. There are efforts ongoing to validate these tests, but again, it's going to take a little while. The laboratory community does not yet have a well-vetted and characterized sero-panel that can be used for validation and verification of the antibody tests coming up. They need to develop that gold standard panel they can use to validate the test before we can have much confidence in those. I am sorry if that is disappointing, but hang in there, we will make progress. Nothing is as fast as we wish it could be.

One use of these antibody tests that we hope to employ is in trying to get a sense of the attack rate of the virus and population, both clinical and subclinical infections. The state is cooperating with some leading medical centers in North Carolina to field cohort studies to try to define both the symptoms and PCR results and sero-survey to try to get a grasp on what is the impact of this virus in the

whole population, not just those who become symptomatic to come to our attention, and to have a sense of how much immunity might be developing in the community.

Just as an added note on that among our many uncertainties about COVID-19: we do not really know if infection confers lasting immunity. Even identifying the presence of IgG in a patient's serum is not necessarily a guarantee that they are truly immune to the virus - so, more to come on that as studies are being performed all over the world to try to understand that a better. So that is testing.

The other thing I want to touch briefly on with you is PPE in medical offices. We recognize this is a huge challenge. I think there has been a lot written and said about the supply chain challenge in obtaining PPE. The state emergency management group is making every effort to buy PPE and distribute it around the state. Unfortunately, every other state emergency management center doing the same thing in every other country is doing the same thing, so it's challenging to actually obtain the items that are being ordered, but we are gradually getting different items of PPE to our emergency management center and those are being distributed to healthcare systems and through local emergency management to healthcare providers. Hugh Tilson shared with you the new website with the new link for PPE request that you can use. If you need PPE and you are a part of a healthcare system, the first place to look us towards your healthcare system and their infection prevention specialist to find out if there is PPE that you can receive that way and then after that you could look for putting in a request through the emergency management system through that link.

We had a few questions submitted before that I would like to address. One was a question about face-to-face evaluation of the mildly ill patient and how to manage those patients when you feel they really need an evaluation even though they appear to be mildly ill. Obviously, we are pushing telemedicine very much. So to the extent you feel you can provide a reliable assessment to your patient and you feel confident you would be providing them sufficient level of care through telemedicine. We strongly encourage that. If you need to know to who, you can refer a patient because you do not have the sufficient PPE in your office the first step would be again to connect with your healthcare system and find out if they have a preferred referral mechanism or practice where they want you to refer to those patients. In the absence of that, you probably will have to fall back on urgent care or emergency departments. As you know emergency departments, many of the large hospital emergency departments, have set up a system where they triage respiratory patients to a separate area and evaluate them there. Hopefully your healthcare system will have something in place that you can use for referring these patients if you are unable to see them in your own practice.

The other question was about testing sites where specimens can be collected on your patients if again, you do not have sufficient PPE to be able to safely collect nasopharyngeal specimens on your patient. There are alternative sampling sites that have been set up throughout the state. These have been set up by healthcare systems and sometimes by local health departments in partnership with clinicians. Again, contacting your local healthcare system that you are affiliated with, and find out if they have set up any testing sites set up. Very, very early in the epidemic, local health departments were sometimes going out to people's houses to test them. That's when we had 2 or 3 or 4 cases in the state and we were trying to contain the virus. We are now in the mitigation phase and there are too many people who need testing for local health departments to be able to sustain that. In some places they are working with healthcare providers to set up these alternative sampling sites, so if you do not have one in your area it would be good to discuss that with your local hospital or health department if it can be set up. Those were the items I wanted to review with you today. Again, I want to thank you for the care that you provide our communities always. And for being on the front lines of this really challenging situation with an emerging pathogen, so thank you very much. I will turn it back to you and we will both be available to answer questions. Hugh, I'll turn it back to you.

Hugh Tilson:

Great. Thank you so much for that update. Lots and lots of really good information. I am getting a couple of questions about the idea of reopening, and one is will there be guidance for businesses, schools, and universities - when we began to roll into reopening - like a role for structural engineering for physical distancing screening for symptoms before entering the building -- do you know whether there are plans to help articulate those leads?

Dr. Davies:

Yes, in fact, there is a lot of work going on around planning how to reopen society safely. Some of you may have seen the White House plan that was released, I think last night or yesterday afternoon, that lays out a phase 3 opening based on the epidemic activity at the time, and they lay out three phases. Of course, state governments have been thinking the same thoughts and working on the same issues in parallel to the federal government. Right now, we are reviewing the federal recommendations and seeing how they line up with some of our preliminary work, but there are very active discussions through all parts of government, and with partners in business and stakeholders around how we would lift some of the executive orders that restrict movement or business activity. That was a somewhat vague answer because we do not have it all mapped out yet. We have lots of drafts that are circulating internally and then we are bringing in representatives from associations that represent the businesses or the schools or whatever entity it is we are looking at loosening restrictions to get their input into what is practical and feasible to try to carry out. All with keeping in mind that we are trying to slow transmission and if possible, prevent it as much as we can in the new setting as we reopen the functions of society.

Hugh:

Thank you. We know those are challenging calculations, and we appreciate all of the work you and your team are doing to make sure they are well thought out. Got a question: Is there a plan to discuss the reliability of these point-of-care tests (POC) in a public forum from a lay perspective to communicate the caution that patients should exercise about the confidence in their immune status with respect to COVID? Specifically, should they be cautious about interpreting results that reflect positive antibody presence to mean they are immune? So two pieces to that - number one, the public's hearing that there are these tests and how to help them understand what it is they do and don't do?

Dr. Davies:

That is a really excellent point. I think we have been struggling internally with what to think of - especially the serologic test. There are some point-of-care tests that use PCR, and those are fairly reliable, but are not widely available. The serology test that can be point-of-care or can be run in a commercial laboratory are the ones that we don't yet know if the results reflect somebody's true immune status or if they are even accurately recording the presence of specific antibody to COVID-19, to the virus that causes COVID-10. So we have not laid out in public communication plan in part because we have been trying to fully understand what the landscape is, but our laboratory experts at the North Carolina State Laboratory for Public Health have really been looking into this, and also partner with some of the large healthcare system labs that have a lot of expertise in evaluating clinical laboratory testing. And I think as they become more clear on what specifically we can communicate that we will need to work on trying to describe in plain language some of the limitations of these tests, even if they turn out to be technically reliable, what it really means if you are IgM positive or IgG positive, in terms of whether you are immune to reinfection. Thank you for that suggestion, and I will take that back to our communications team.

Hugh:

We got a follow-up that says the antibody positive is not a diagnosis or if it conveys protection or immunity also needs to be clear, because it may not be reliable for either. Just a follow-up observation.

Dr. Davies:

Exactly.

Hugh

One question. I do not know if you know the answer to this, but if supplies of PPR are ordered from emergency management, do the providers have to pay for those or are they provided free? Do you know the answer to that?

Dr. Davies

I do not know the answer to that. I suspect I know the answer, but that does not help anybody. I will have to get back to you with the definite answer on that.

Hugh:

Can you talk about recommendations for non-medical businesses screening employees for COVID-19 as they come to work each day? Best practices?

Dr. Davies

We have recommendations for screening employees, on our website, in certain settings like childcare, in the emergency childcare settings that are open to allow healthcare workers and other essential workers to be able to leave their children so that they can take care of society. We have guidelines for child care -- screening of child care workers -- and also in long-term care facilities like the skilled nursing facilities, how they should screen their employees coming in and out of a facility. You can find those on the website. Generally, we recommend a symptom screen, which is using a short questionnaire to ask about common symptoms, fever, cough, shortness of breath, sore throat, diarrhea because that has come out as a symptom that does occur fairly frequently, especially in mild cases. So, just asking the employee if they have any of those symptoms, sending them home to self-isolate if they do, and have a follow-up with their healthcare provider by phone for whatever medical evaluation is merited in that situations.

There was some controversy around temperature checks. They are visually very reassuring to the public. I think a lot of people feel reassured when they see the scanning thermometer held up to people's foreheads or temples, that it's an objective measure of whether the person is sick or not. We don't recommend against using those, but we are not at this time really pushing those as essential to the symptom screening because of a few things. One, even people that are symptomatic with COVID-19 do not necessarily have a fever although most do. There is apparently a fairly large proportion of infected people who are asymptomatic or pre-symptomatic who may still be shedding the virus to some extent and so they are not going to have a fever anyway. And then the infrared thermometers are at baseline not very sensitive. If in the screening you're doing, anyone does have a fever, that they may not even pick that up. If you do pick it up they probably do really have a fever and you can exclude them. You have to balance the logistical challenges in the impact on workflow in your business before you would want to implement that. We really recommend these symptoms screening and a lot of messaging to employees about not trying to come into the office if they are symptomatic in any way. Of course, we are still strongly promoting teleworking wherever that's feasible.

Hugh:

The related question is the use of cloth masks for employees. Do you have guidance about if they are in the office whether they ought to be wearing cloth masks?

Dr. Davies:

So that's a tricky question for me personally and professionally, because I have opinions that might not match others. So, I would refer you to the CDC website. They have guidance about the use of cloth masks, and they lay out the reasoning and that is what I would refer you to.

Hugh:

We have a follow-up on the testing sites. Many health systems are not taking patients that aren't established with them, and if that is the case is the only option the health department if they have no swabs and/or PPE? I think they just want clarification about what to do. The health system isn't taking folks.

Dr. Davies:

I am not sure. You can certainly call your health department but I am sure that all health departments are set up to be able to do testing on a one-off basis when you have a particular patient and we need to send them in today to get tested as opposed to doing some sort of response to an outbreak in a long-term care facility or a similar setting. So, certainly call your local department to find out if that is an option. If that is not an option I really do not know what to advise because I know that the companies like Lab Corp are not collecting the specimens although they can run the test. If your healthcare system won't collaborate with providers who are not in their system, I do not know how to help you. I do not know how to guide you on that.

Hugh:

Maybe as you guys are thinking about the testing and tracing and trending - taking that on as a comment from this group might be helpful as you are working to develop those policies. I think that might be the reason - [ ]

Dr. Davies

Yes, definitely

Hugh:

Last question and then I will refer everybody, if you have question, please submit it using the Q&A feature. It's really more of a comment - the more advance lead time you can provide about reopening, especially for colleges and universities, the better - and they suggested 2 months might be helpful so they can actually plan. I think that's more of a suggestion than a question.

Dr. Davies:

Yeah, that's an excellent suggestion. And to the extent that any of us control these changes, we will try to give as much lead time as possible so they can be executed smoothly and effectively.

Hugh:

A follow-up question on masks, which obviously, I won't have any editorial comments. How about healthcare providers wearing cloth masks over a surgical mask on and what about general public masks? I assume that the surgical masks and not cloth masks. Other any recommendations for patients about that?

Dr. Davies:

In terms of the medical masks and surgical masks, because of the shortage of PPE there are currently are no recommendations for asymptomatic people to use medical quality surgical masks. For symptomatic non-healthcare workers, if they have to leave the house for instance, to go see a healthcare provider or if they appear in your office with symptoms, we recommend using a medical surgical mask as a source control to decrease the exposure to other people, but there are currently are not recommendations about having medically vulnerable people, or people at high risk for severe disease, wearing masks to protect themselves as they go about -- wearing surgical masks, proper medical surgical masks. Chanchal, can you address the question of putting the cloth masks over medical masks, if there's specific guidance?

Chanchal:

The cloth masks are not considered PPE, so there are no recommendations about cloth masks by the CDC as it relates to that. So the cloth mask recommendations, considering wearing cloth masks, it's just a general public recommendation by the CDC, and that is for source control. So if symptomatic individuals, or asymptomatic individual wears the cloth mask, they protect the general public around them - so the cloth mask is intended for that purpose, that recommendation. There is no recommendation that staff in facilities, healthcare facilities, wear a cloth mask. Unless your facility-based policy has determined that they wish to do that - there is no recommendation for cloth masks.

Dr. Davies:

Thank you Chanchal. And I'll just add on to that - I would be cautious about trying to preserve your medical surgical mask by putting the cloth mask on top, because

one of the things that happen with cloth masks is that they collect moisture and you are trying to not let your surgical mask get moist, as that is going to decrease its protectiveness. I think there is some reason to not do that unless you get specific infection prevention guidance from your healthcare systems telling you that is to be done.

Hugh:

I guess the follow-up question that we got is there a formal recognition for healthcare providers to wear masks in practices and hospitals?

Dr. Davies:

For providers when they are just walking around the hospital but not seeing a symptomatic patient?

Hugh:

Yes. And when they're seeing patients, I guess

Dr. Davies:

Okay.

Chanchal:

I can answer that. Healthcare personnel, CDC's most recent updates as of 4/16, as part of source control, it is recommended that healthcare personnel wear facemasks at all time while they're in the healthcare facility. So that's the current recommendation, for source control. That's very recent. And they are generally preferred over other methods. So face masks offer both source control and protection for the wearer, against exposure to splash and spray, against infectious materials from others - so that's now the recommendation in healthcare facilities to wear face masks - surgical face masks and even long-term care facilities.

Hugh:

Thank you very much. When will the new guidelines be ruled out on testing symptomatic patients so we can see trends?

Dr. Davies:

I think testing is more generally available, and PPE is more available so that we can safely collect specimens is when recommendation that will be more liberal about testing. I do not know that we would -- from a public health point of view, that we would necessarily recommend testing asymptomatic people in a clinical setting unless it is a part of the study. As I mentioned, the state is coordinating with healthcare centers and specifically UNC Chapel Hill, Duke University, and East Carolina University on population-based sero-surveys and symptomology, and also possibly PCR testing of nasopharyngeal swabs in a population over time to try and get a better understanding of asymptomatic to symptomatic ratios. And I think unless it's done in a systematic fashion, that it's not that informative. If you have asymptomatic patients asking for testing in order to reassure them that they have immunity, then we still have the challenge that at this time we don't know that having IgG or IgM antibodies to virus that causes COVID-19 actually confers immunity. It's often the case that if you have the antibody it confers immunity, but it's not known how long that lasts, and there have been cases reported out of Korea of recurring illness in patients that have recovered from COVID-19, and that's not known if that's re-infection or re-emergence of virus in the patient. So, there's still a lot to be learned there, and at this point we wouldn't recommend testing asymptomatics in a clinical setting unless you're part of a study.

Hugh:

So we have a question about patient self-testing - are they still working on a plan once those tests are available.

Dr. Davies:

So there are - there is working being done on having patients collect anterior NP swabs themselves to be submitted for testing. I don't know the status of that. The last conversation I was involved in about that, it was still being evaluated for

sensitivity. It's probably not as sensitive as the NP swab, but again, if it's positive then that would be informative. But I don't know the availability of that for actual clinical use at this time.

Hugh:

We have about a question of symptom of diarrhea. Should people with symptoms of diarrhea stay home to await develop of other symptoms? Should patients with diarrhea get testing?

Dr. Davies:

So the diarrhea has come up in the some recent papers looking at mildly ill patients from China, and I wish I had the paper in front of me. The frequency of the symptoms I think was around something over 30% in those patients and sometimes it was the presenting symptoms. In general, and most workplaces we would -- public health would -- recommend that anybody who is experiencing diarrhea should not go into work or interact with the public. Generally they should stay home, wash their hands frequently, see if there symptoms resolve or worsen and then consult with their physician. I think in reference to COVID-19, I think just using the general guidance of stay home until the diarrhea dissolves or if other symptoms develop contact your physician or healthcare worker for further assessment. I wouldn't, I think, try to test someone for just diarrhea yet until we know more and until we have more testing available.

Hugh:

Two more questions about masks. One is guidelines for reusing surgical masks, and the other is just clarifying that still changing after each patient and using a separate mask for going out of the healthcare facility is the best practice.

Dr. Davies:

Chanchal?

Chanchal:

There is current guidance from the CDC about extended use of the facemasks. It is -- and that is surgical facemasks and N-95 masks - that's current guidance. Healthcare workers wear the facemasks while they are in the facility. If there are chances of splashes occurring they need to change that.

Hugh:

We just got another question. How close are we to being able to accurately track and trace our community to determines spread and high-spreaders. Weeks or months? Are the PCR and antibody tests still not sensitive enough to accurately determine?

Dr. Davies:

I think there are several things rolled up in the question. There's having the resources to track every symptomatic patient and their contacts, having the resources to test them, and then there is, will the tests be informative? Going backwards -- for PCR testing, if when you test people pre-symptomatically, they can be positive, but the positivity rate is lower. The more symptomatic they are, usually the better chance you have of finding the virus. In terms of resources for testing, I think we are still probably months away from having enough testing to be doing that on a really widescale, following up on contacts and testing them. We are doing that in high-risk settings like long-term care facilities and correctional facilities where we have people congregated and no way to really affect they separate them, but I do not think we have the testing resources to support that yet as a society. But we are working towards that. And then the contact tracing resources -- our local health departments have been doing an amazing job with following up on cases and identifying contacts and monitoring them for symptoms, actively monitoring them, calling daily, but because testing was so limited we were not able to test most of those contacts unless they became symptomatic. In order to do that kind of follow-up for the incidence of the disease we are seeing now in North Carolina, we would need to bring on a large workforce and train them to do that, and we are looking into that very actively. I think that it is also potentially months away.



Hugh:

Those are the only questions that we have, so let me thank you both very much for your time today. This was incredibly informative. Thank you everybody on the call for the great work you are doing in your communities, caring for your patients, we really appreciate that. Before we hang up, do you all have anything you want to say as closing words?

Dr. Davies:

I would like to once again thank all of the healthcare providers. This is one of those few moments in society where people are stopping and recognizing what you do, and you deserve that recognition all of the time. I just want to express my admiration and appreciation for how hard you work, and how conscientious you are on behalf of the people who depend on you, and thank you.

Chanchal:

I would also like to think you all for all of the hard work you do for the community.

Hugh:

You got a comment on here -- thank you for all you do, Dr. Davies. Please thank your whole team, and welcome back. Thank you all very much. Take care.  
Goodbye.

[ Event Concluded ]