COVID-19 Update with Dr. Sarah Moyer, Director of Louisville Metro Public Health & Wellness – 5/8/2020

Dr. Moyer: Thanks for having me here. I know GLMS meetings are a great way for me to stay connected to the medical community, and you guys have done a lot over the last three months in helping the city respond to the pandemic. We are really appreciative of our connection and our ability to work together to really serve all of Louisville. As of today, May 8, we have 1,553 test-confirmed cases and 906 people who are in recovery. We know of at least almost 10,000 people in our city that have been tested and about 106 people that are in our hospitals now. 42 are still in the ICU. Those numbers are reported to us from the hospitals; we think they are accurate, but we don't know for sure. We have had 113 deaths. The race ethnicity of our confirmed cases about 58% are white; 34% are black and 7% are Asian. Of our deceased, 65% are white, 30% are black and 5% are Asian. Then for ethnicity of confirmed cases about 12% are Hispanic/Latino and of the deceased about 3% are Hispanic/Latino.

Over the last three months when you guys have been a big part of everything that happened. When we had our first cases and started realizing that it was spreading fast in the community, faster than we were really able to even show with a test just like the rest of the country, we had to enact strict social distancing, close everything down, our hospitals didn't have enough PPE, cases were increasing exponentially, we were just really nervous about having a big surge much like New York, Italy and China had had.

Within two to three weeks of shutting the city down, we saw drastic changes just with the numbers of cases that were increasing. If you look at the hospitalizations at Norton and Baptist, I really think the cases peaked in late March with hospitalizations. Some of the other hospitals are increasing more now later based on different patient populations. Our goal with shutting everything down really was making sure hospitals had capacity, that we had time to increase our supply chains for PPE, that we gave scientists enough time to increase the number of tests and made our tests better. We knew straight from the beginning that even the nasal swab one that was the gold standard that everyone is doing sometimes can only be 60% sensitive and so we know we are missing a lot of cases, just a lot more COVID in the community than we're able to show on paper. The third piece is increasing our public health capacity. Really, the only way that we are going to box it in and contain it is if we are able to identify and then isolate people that are sick and then will become sick for that contact tracing before they get sick and are spreading it to other people.

We learned a lot in the last three months, everything from, I don't know, it changes every day. That is the great thing of a novel virus. We still don't know for sure if you get immunity. We still don't know for sure exactly what the tests are showing. We are learning different ways of how to treat. Physicians in the community are gaining more tools and are doing better every day with how they are treating it. All those pieces are giving us more time and why we have to enact these strict measures. It also gave us time in the city to build up some systems.

Not only do we have to make sure people are staying home, but we have to make sure that they have all the things they need to stay home, so GLMS has been instrumental in making sure people get the medicine they need, if they can't have access to it. But we've got systems set up so they can get food and are going to be starting some housing as well. We do have housing going for the homeless right now. We have a shelter in place just for people that are quarantining or isolating. Our goal is to ramp up testing so for testing right now, we think

we have enough tests in the city to be testing anyone with symptoms. So anybody who is sick and think they have COVID, our hospital systems, as far as I am hearing, including Family Health Centers, Park Duvalle, Shawnee and Christian Mission have enough capacity to be doing people with symptoms. We are slowly ramping up asymptomatic testing because we know the virus spreads before people know they have symptoms, or there is even a number of cases where people don't even know that they are sick, so testing asymptomatic people is really important so that we can identify who is sick before we get a whole area sick. Corrections, we've been doing that for the last month. The homeless shelters, we've been doing some, hopefully starting soon. We're trying to get the long-term care facilities as well are starting the asymptomatic testing and then trying to get the workplaces, key factories where it is really hard to maintain social distancing up and going with that asymptomatic testing. Then from there, some community asymptomatic testing has happened as well. You see Kroger and Walmart and other businesses coming in and doing that on their own. But trying to put a whole community-wide approach together for that to make sure we are testing the right people first, but the testing is still kind of limited.

Then building up our public health system, thanks to Hep A we were well prepared and knew how to pivot quickly. Pretty much my entire team is working on COVID; the environmentalists, those people are working on all the social distancing complaints, so everyone who thinks a company or sees something happening in the community that is not following the Governor or city orders or just doesn't feel right they are complaining to 311, and then my team is investigating, whether that is by the phone or going out, to do social distancing citations or closing places down that shouldn't be open. A good chunk of that department is working on case investigations, so calling all the cases when they get reported to us, checking in on symptoms, that sort of thing, also finding out where they've been, who they have been in contact, working with their employees, giving them information to do contact tracing and then we are hoping as we build the staff up, we can actually help with that contact tracing piece by identifying people that are close contact and making they are home quarantining and monitoring for symptoms and aren't out in the community or still working when they could potentially be spreading the disease. Then the rest of the team is helping with planning, and organization and communication, all those pieces are really huge in a pandemic.

Those are the main points I wanted to hit. Just really thankful that we've had expanded Medicaid and great access for a lot of our vulnerable populations in Louisville, compared to other cities. I think that has helped us identify people early and made sure testing was happening in our FQHC's. I think that has been really helpful. We still have inequalities in our racial ethnicities data but right now, today, it is slightly better than a lot of other cities of similar size in the community. I am really thankful for our relationships with the hospital systems, I think it has helped us to identify cases earlier than we would have if we were just relying on the tests and help make some of those calls. I think Kentucky shut down a lot earlier than other states in the course of the disease and I am so grateful for the relationship with you guys for that, because that helped move that along. That's it. I am really thankful for our Center for Health Equity that has been able to keep our focus on equity throughout this whole thing, so that we are capturing the right population. That has made a big different as well too.

Q&A

Dr. Moyer's answers in italics

In regard to the reopening of our Ambulatory Surgery Centers (ASC), if an employee or physician tests positive for COVID-19 while working at the facility, will patients that were in the facility at the time need to be notified of possible exposure, even if they were not directly exposed to that employee or physician? Will the patients, other employees and physicians that were in the facility need to quarantine even if they were not directly exposed to that employee/physician? Will the ASC need to close and, if so, for how long? Will the physicians that were in the facility need to close their offices?

First, just making sure everyone is following proper sanitation protocols, infection control measures, looking at CDC's website and GLMS's website, they've got some great guidelines on there, so that's the most important thing. As long as those infection control measures are followed, really we're looking at what close contact is. Somebody within 6 feet for over 15 minutes without PPE and protective measures is what we consider close contact. If we're doing that case investigation would require them to quarantine and to be at home for two weeks monitoring for symptoms and not interacting with other people. As long as that's not happening, that's what we're most concerned about.

The general message to the community right now is that COVID is everywhere. So, if someone's coming to the office, they should be expected to be interacting with COVID. So, just making sure you guys are pressing those messages that hand washing is really important, mask wearing is important when your patients are going out. Please just make sure that they're not touching their face, not touching their masks. That's one of the things that makes me really nervous about all the mask wearing, just seeing a lot of people touching their face. So, hand washing, staying 6 feet away from each other, not touching your face, are all just really important, so make sure your patients understand those messages.

[In response to whether patients and employees need to quarantine if exposed with indirect contact] *No, only the people that had that direct, long contact would have to quarantine. My hope is that with all this messaging and everything going out, that there really won't be very many people that would fit in that category.*

[In response to whether the ACS needs to close if someone in the facility and tested positive] *It depends on the situation. If they were just there sitting and just there for an office visit, no. But if we find that some infection control measures aren't being done and need to have cleaning done, then that would be a different situation.*

Dr. Burns: In terms of health care workers, are you recommending, now that we have more testing, that we have our employees get tested? And how often? Or do you not recommend that unless they actually have symptoms?

I do recommend some asymptomatic, or surveillance, or insight type testing because we know that people tend have symptoms before. It doesn't have to be every day or the same people, but just some random testing just to see, or if you know that a patient comes in and develops COVID, we may need to

test people that were around them. Just some random monitoring just to make sure it's not popping up, if you have the test available, would be helpful.

How should a mask be handled after wearing? Since masks are being used mostly to protect others, is there a concern of getting contamination from the outside of a mask after wearing it in public?

Yes. That is my fear with the mask wearing. I think there is some evidence to show that it does decrease transmission, especially if you're asymptomatic and don't know you have it. But just like you learned in medical school and all your proper PPE training, the rest of the public doesn't have that. So, as much as you can help get that message out. It's just like how you're putting a mask on and taking it off when you go into a room that's in isolation or in for surgery, just making sure you wash your hands before you put it on, take it off, either throw it away or put it in the laundry, wash your hands after you do that, those are all really, really important. And please try to help us get that message out to the general public, as well.

Dr. Goldberg: Are there any programs to provide training to employers in the area about how to properly use PPE?

All my same theories, I think that's why a lot of public health professionals were slow to recommend universal masks, just trying to weighing the benefits and the risks. Because we do know that touching your face is one of the easiest ways that it gets spread when you're moving your mask up and down, that is definitely happening. I don't know of any programs, but both the CDC and the WHO have some great videos online that have been encouraging people to watch. So, if you see that, let us know and we'll try to get the message out to employers to make sure that their staff are watching those and following proper protocol. I think the other one besides masks, there's gloves. I see a lot of people wear gloves and they think they're safe, and then they're touching something, and then touching their phone, putting their phone up to their ear. I think it's much better for the general public not to wear gloves, but just to practice really good hand washing.

Dr. Burns: I was on a conference call with Steve Stack yesterday and we were talking about the Battelle decontamination system that's now here for N95 mask decontamination. And Sarah I know you're very familiar with that, but it was very interesting, he said he's surprised we got the system here because we did not have that many active cases. But he said he fears that if we don't utilize it, that it will go away. You can actually decontaminate N95 masks for 20 cycles, as long as the mask is in good shape. We should take advantage of it. His concern is that because we don't have as many cases here, if we don't utilize, they can decontaminate up to 80,000 masks per day. The hospital systems and all the doctor's offices can do this for no charge while it's still here.

Where can physicians and nurses in Louisville get antibody testing if we think we had COVID-19 with mild symptoms, but do not work in a hospital? Hospital employees are receiving testing through their employers. What about private practice health care providers?

There's still a lot of unknowns and uncertainty with the antibody testing. Right now, we don't know for sure if they're identifying antibodies to COVID or if they're identifying antibodies for the normal coronaviruses. We don't know for sure what that means if they detect it. We've seen cases where people have been IgM negative and IgG positive, but then we get PCR and the PCR was positive. So much uncertainty with it, that I would not be making any medical decisions based on the antibody testing today. Hopefully that keeps getting better. I know the FDA pulled all non-approved tests from the market or was discouraging use earlier this week, so stuff keeps changing with that. Norton is doing some limited antibody testing, I think just for employees right now, but they will expand based on capacity and based on the results that they're getting. I think they're working hard just analyzing and trying to figure out what it actually means. And same with University of Louisville, as well. They've got a co-immunity study that they're going and starting with health care workers in all the hospital systems and I think private practices as well can get in on that. And then LabCorp and I think Quest as well are doing antibody testing so you can send them off with those. Probably the safest ones out there. Just make sure it's got that FDA EUA on it. Those are the safest and most accurate ones out there right now, but there's just still so much unknown. Hopefully more to come in the coming weeks and months with that.

Dr. Tuckson: Do you recommend that family members or close acquaintances of health care workers get tested?

I think as the number of tests increase, I don't think that's a bad idea, especially if you're in the hospital treating COVID patients, just to make sure that they're safe, especially if they're going to other jobs outside the home, as well, too. If they're just quarantined at home and don't have symptoms, there's probably not a need. But if your spouse is working elsewhere, especially if they're working at a nursing home, or homeless shelter, or corrections, yes, I would definitely get tested.

Now that more data is available regarding the high percentage of asymptomatic and minimally symptomatic COVID-19 cases, what do you think about a revised case fatality rate?

Our case fatality rate right now if you calculate it is based on number of tests we've done so that will get revised. That is moving based on the test and some of the tests even are not accurate, all that is changing. And yes, there is the co-immunity study that UofL is doing is going to try to help us get a better baseline. Either way, it's still an issue and our hospitals still have COVID patients and people are still dying younger than they would from other causes. If we have a different case fatality rate, it's not going to change what we're doing right now.

Dr. Tuckson: Do you think that the case fatality rate will go down with more people being tested?

Yes, for sure. I think Louisville is at 6% currently, but we know from looking at other countries that I think it's closer to 1% or anywhere between 0.3% and 3% is probably more accurate. Definitely know that is not the true case fatality rate, but it won't change what we're doing.

Does the CDC differentiate between deaths due to COVID-19 vs deaths with, but not caused by, COVID-19 and how does this impact evaluating the true death rate?

Determining that is a difficult process, you probably know more about that than I do. It's hard to piece out the difference between someone whose death is due to COVID and someone who died with the COVID infection. There's always a lot of factors that play into why someone does die. I'm sure even if they died with the infection it probably had something to do with it, so that's how it's being counted right now. It's up to the physician on how they write it on the death certificate, as well.

Dr. Tuckson: It sounds like some countries have issues because in Denmark, anybody that dies and has COVID-19, it's considered a death due to COVID-19, whereas other countries don't. That could count as a variability.

Yes, for sure. And just the amount of testing is up, as well. As we're learning more and more about the disease, we're seeing different symptoms, different causes of death, different pieces, and so some things that weren't even thought of as COVID probably are looking back, as well.

The Hepatitis A outbreak in Louisville was handled extremely well and received well-deserved local and national attention and praise. Was there anything you learned from the Hepatitis A outbreak that helped you deal with the current COVID-19 pandemic here in our area? If so, what are we doing differently because of what we learned from the Hepatitis A outbreak?

The Hepatitis A taught us to think for solutions not combined by previous experience, that outbreak was novel for us, in that it centered around two very difficult to reach populations and we had to come up with ways to reach them. The homeless and people who use drugs. One really big similarity is that the two were both collective efforts. With Hep A, we were able to handle it just within the Health Department, with COVID, we have expanded and we have an entire Emergency Operations Team with all of Louisville Metro government jumping in and helping out. Hep A taught with my employees, to be able to move from their normal work jobs into a different set of responsibilities and not really think twice about that, they were able to jump in right away to help us with COVID. One of the big differences is that there is a preventive vaccine for Hepatitis A, and so we're able to identify those close contacts, where right now we just tell them to go sit at home or in a hotel for two weeks. We have to get them a vaccine to prevent disease transmission. So, it's a totally different game there, just with having a better tool. So we're hoping that within the next two years we will be in the same situation with COVID as we were with Hep A.

There is a lot of discussion about the necessity of contact tracing for those who test positive for COVID-19, and some confusion around what contact tracing actually is. Can you explain what goes into contact tracing and the Health Department's role in this process? How can physicians help in this process?

Contact tracing is one of our tools to stop the spread of the asymptomatic transmission that is happening. We know that people are able to spread COVID before they develop symptoms or for some people, they don't develop symptoms at all. What my staff does, we've got the case investigators, that

call all of our positive cases and talks to them, finds out what they've done, where they work, where they've been, and then right now we're telling them to identify anybody that they've been in contact with for more than 15 minutes cumulatively within 6 feet and notifying them that they are at high risk of developing COVID symptoms. Those are the people that we are trying to then get isolated away from other people and watch and monitor if they have symptoms for 14 days. In that 14 days, if they develop symptoms, we want them to get tested, and then we go through the same process with their contacts. Our goal is to be able to identify all of our cases before they become cases eventually, and that's how we're going to box it in, so contact tracing is what helps us do that. Get ahead of the game, we know where the cases are going to pop up because they're close contacts and we had them isolated before they could spread it to anybody else. That's the goal with contact tracing.

We're just trying to build up that work force to do that. We've been focusing just on the case investigations with the staff that we have right now and relying on employers and the patients themselves for the hospital systems or wherever the patient was, to do that contact tracing piece for us as we build up our public health workforce and we're going to have more hands on involvement with that. I put an RFP out earlier this week, just encouraging people to apply. We've got about five days left of that being open, so if any company out there is interested, we are looking at contracting that piece out to help us do that.

One thing that's really important to the whole goal is identifying new cases before they become cases, and one of the best ways to do that is to have the best information on the actual cases that are testing. So, just making sure that that Kentucky's EPID 200 reportable disease form that gives us all the information about the case, if you can make that as detailed as possible, that's the form where we get the racial data and the demographic data, and a lot of times that is left empty. It's where we know the workplace, where we know how to contact the patient, so the more details we have, the better and quicker we're able to respond. It says within five days of exposure that somebody else really starts to develop symptoms, so we've got hours and days to start these investigations and get those people quarantined. So the faster you can get us that information and the more complete it is, that really just helps out a lot. Anytime you test someone, it's really important that they are quarantining until they get the results back. As for the asymptomatic cases, if you think somebody has COVID, please just make sure they're quarantining until their get their results back and if you thought they had COVID, as we know the tests aren't great, they should stay quarantining at least seven days since the start of their symptoms if they were really mild, but if they were longer it's changing, I think it's three days after the last symptom goes away, right now. Stay up to date on CDC's website and KDPH's website because those all change as we learn more about COVID, as well.

Dr. Burns: Do you need physician volunteers for contact tracing?

We are okay with volunteers right now, we've increased our team up to about 55, and so just managing them and training them just with the limited staff I have, I think we're at capacity. Especially with space, we run out of space to be able to to social distance. The RFP is out there and I'm hoping that when that gets out there, that contractor will be able to bring people in, whether they use volunteers or

paying people, that'll be up to them. There's other ways to volunteer, as well. I know GLMS is helping us out a lot so I would start there, and if they don't have the use, I know we're working closely with Bert so if we have something else to do, we will let them know.