

**Transcript of a News Teleconference on 4-14-2020, Seattle, WA, hosted by  
Public Health—Seattle & King County**

**Speakers:**

- **Dr. Jeff Duchin, Health Officer, Public Health—Seattle & King County**
- **Dr. Chris Spitters, Health Officer, Snohomish Health District**
- **Dr. Anthony L-T Chen, Health Director, Tacoma-Pierce County Health Department**
- **Dr. Mike Famulare, Principal Research Scientist, IDM**

**Transcript:**

OPERATOR: Good afternoon. My name is Cia (phonetic) and I will be the conference operator today. At this time, I would like to welcome everyone to the telebriefing on community mitigation measures. All lines have been placed on mute to prevent any background noise. After the speakers' remarks, there will be a question and answer session. If you would like to ask a question during that time, simply press star and the number 1 on your telephone keypad. If you would like to withdraw the question, press the pound key. Thank you. At this time, I would like to turn the conference over to Keith Seinfeld. Please go ahead, sir.

MR. SEINFELD: Welcome, everyone. I'm Keith Seinfeld from Public Health Seattle & King County and the briefing as I believe you all know is to describe an updated report for the -- from the Institute for Disease Modeling that shows progress in slowing disease transmission in King, Snohomish, and Pierce Counties and the need to continue our efforts to contain the spread of the virus.

If you will want to be asking questions after the four speakers, the way to do that is to use \*1 to get in the queue for questions. We're going to have four speakers. The health officers for the three counties I just mentioned -- King, Snohomish, and Pierce -- as well as Mike Famulare from the Institute for Disease Modeling. So, first, we will go to Dr. Jeff Duchin -- it's spelled J-E-F-F D-U-C-H-I-N -- the health officer for Public Health Seattle & King County. Jeff, go ahead.

DR. DUCHIN: Thanks, Keith. Appreciate it. And thank you to everyone for joining the call today. I'm grateful to our colleagues at the Institute for Disease Modeling and Dr. Famulare and his colleagues for continuing to work with us to provide such valuable information to help us understand the epidemic that's facing us here locally in Washington State and particularly here in the western Washington area at this point.

I -- the new report that his group has issued is very encouraging and is consistent with the earlier report that showed that thanks to the tremendous work that our community has done to distance themselves, to stay home, to avoid non-essential activity in the community, we have continued to see a decrease in transmission of COVID-19 locally, which is wonderful. I think that we're not exactly where we need

to be yet in my opinion, but we've definitely moved a long way in the right direction.

The new report shows that in contrast to what we saw early in the epidemic where every person who was infected transmitted to the disease to, on average, two or three others, we're getting closer to that landmark where each person who is infected spreads the disease to one or fewer others and that is really what's needed to stop the transmission of the virus. Unfortunately, there's still uncertainty around that number. We've been steady with our case counts for about two weeks. So, we're not seeing a progressive decline which I would like to see and there's still significant uncertainty because of the lack of widespread testing in our community.

We have, as you all know, been challenged by limitations in both initially availability of testing and then subsequently test kits. And so, it's not clear to me that testing is widespread enough in the community at this time to know with certainty whether the assumptions that were made in the modeling that testing is widespread and steady are accurate. So, I would like to see additional weeks of observation as we ramp up testing and get more information about where testing is and isn't happening to be able to know with certainty where we are with respect to the actual amount of transmission.

But it is very encouraging and what this means is we should start thinking about the next steps in our transition away from the extreme social distancing measures. But it should be very clear to everyone that we are in no way ready to do that at this point. There are a number of things that need to be in place before that can happen. In addition to increasing certainty about the amount of transmission that we think we're seeing and decreasing cases locally, I would like to see increased testing so that if we do begin to gradually lift our social distancing recommendations that we are able to quickly identify people who do become ill and get them isolated.

I would like to make sure that our healthcare system is able to be prepared for a potential surge or resurgence in cases if the relaxation of measures leads to an unanticipated increase in cases and that means critical care capacity, ventilators, and beds. And as an aside, I'll just tell you that our healthcare system has done an amazing job adapting to the large number of COVID-19 cases that they're caring for by taking unprecedented steps in their facilities and changing the way they deliver care and cancelling some types of care and repurposing spaces so -- and healthcare providers so that they're able to do that. And they need to be able to maintain that capacity and be prepared for potentially even a larger peak than we saw to date.

Finally, we need to make sure we have enough personal protective equipment available for the healthcare system and for others in the community who need to care for COVID patients, particularly if we should see an increase, and the ability of our public health system to conduct very rapid and widespread case and contact tracing activities to prevent ongoing transmission if we see additional cases once we relax social distancing measures. And I'm pretty confident that we will see additional

cases. So, with that, I think what -- I will end my comments and just summarize in a nutshell.

I think this research, which is consistent with the report released from the CDC yesterday, is very encouraging. I extend my sincere gratitude to the community and everyone who has undergone such hardship to make this work and prevent cases of COVID-19, hospitalizations, and deaths, and ask for the community's patience as we move forward carefully and plan our next steps.

MR. SEINFELD: Thanks, Jeff. Next up we'll have Dr. Chris Spitters. That's C-H-R-I-S and Spitters is S-P-I-T-T-E-R-S. He's the health officer for the Snohomish Health District. Chris?

DR. SPITTERS: Thank you, Keith. Good afternoon, everyone. And thanks for being here. Jeff just did a great job of covering, you know, I think the meaning of these findings and I'll just really reiterate what I think are some of the key points that he raised. The good news is that these findings of what -- you know, the model showing decreased transmission validate our recent observations of decrease in cases being reported over the last couple of weeks and then just in the -- it appears maybe a week ago or so that hospitalizations in Snohomish County peaked and now are gradually starting to come down.

And so, that -- they all -- you know, those three sets of findings do make a -- a nice package that suggests that indeed all the effort that's been made by the people of the state and region to stay at home, minimize their contact with other people and only engage in essential activities has begun to have an effect on flattening the curve and -- and, you know, ultimately we hope getting us through to the other end of this thing, you know, with fewer hospitalizations and fewer deaths and most importantly in the very short run without -- without swamping the healthcare system with more patients than it can handle.

So, this is all good news. I will say, you know, that we still have some challenges. One is there's still a long way to go as -- as Jeff implied. We're not at the end of this by any stretch of the imagination. And I agree that it's even -- we're not even at a point where we can think comfortably about relaxing the social distancing measures. But if things continue in this direction, then I think that -- that is, of course, on the horizon. And how we go about doing that is -- is very important so that we don't foment another round of disease and then, you know, get a resurgence and again, have not only the suffering but also end up struggling with a healthcare system that may not be able to cope with the low.

So, and I think the key elements that Jeff pointed to are, one, making sure that there's adequate testing capacity in the community so that anyone who ought to be tested can be tested and get those results in a reasonable amount of time, not only for their well-being but for, you know, public health and the system's management of their situation in terms of isolation and that sort of thing, making sure that our hospitals have the ability to respond to all the COVID cases that have been

occurring as well as the other routine things that they've been decreasing involvement with.

But, you know, making sure we have the capacity to serve all the acute needs of the community, that they have the personal protective equipment to help them carry that work out safely. And then at the public -- local public health level that we have adequate resources and that the scope of the problem are well-matched so that we can do more in -- more thorough and intense oversight of cases and contacts to try to further contain transmission of disease as numbers go down.

You know, back when things were -- when we were at the peak, what happened with any one particular case, absent being a super-spreader, you know, was much, much, much less important than people staying separated. But as things go down and the background rate of disease declines and we start to move toward sort of un-layering the social distancing, controlling transmission by cases and contacts will be a much -- proportionately a much more important part of the ongoing control effort.

So, having said all that, provisionally good news. I think we have to take it in stride and kind of humbly be grateful that we got this far, but that there's a long way to go. It's too soon to let up and there's a lot of work ahead and there's some specific criteria that Jeff mentioned and I tried to reiterate, that we really need to meet before we can comfortably start thinking about rolling back on the prohibitions of gatherings and the discouragement of leaving home. Thank you.

MR. SEINFELD: Thank you, Chris. Next up we're going to hear from Dr. Anthony L-T Chen, the health director for Tacoma-Pierce County Health Department. That's spelled Anthony, A-N-T-H-O-N-Y, capital L, hyphen, capital T, and Chen is C-H-E-N. Dr. Chen.

DR. CHEN: Thank you. You know, we -- in Public Health we use data, whether that's new confirmed cases, number of deaths, or the number of people hospitalized to help us understand where we are in this pandemic. We are so fortunate to have partners like the Institute for Disease Modeling to help us get data and understand what is going on in the pandemic.

The number of COVID-19 cases and deaths in Pierce County continue to rise. For the past week, new cases have been fluctuating in a range. What's that mean? That means the rate of increase is flattening but the curve is not flattening yet. The good news is that we are not increasing at an exponential rate. The sobering news is that we are still increasing at a linear rate. We may be getting close to our peak, but we do not know for sure until we see a clear flattening and downward trend in new cases for several days.

We need to see a significant drop in new confirmed cases, deaths, people hospitalized, before all of us can return to our pre-pandemic lives. Based on the number of positive cases, 99 percent of Pierce County residents have not gotten COVID-19 and therefore have no immunity. We really appreciate that people are staying home and slowing the spread of disease, but we must keep it up and not let our guard down.

Measures put in place to slow the pandemic are working. The rate of increase is flattening -- flattening, but the curve is not flattening yet. Now more than ever we must continue our commitment to proven measures that help protect our community. With that, let me turn it over to Mike Famulare from the Institute of Disease Modeling.

MR. SEINFELD: And thank you, Anthony.

DR. FAMULARE: Hi.

MR. SEINFELD: Go ahead, Mike. So, I just want to give you a full introduction because people will ask later. Mike Famulare is spelled F-A-M-U-L-A-R-E. He's a principal research scientist at the Institute for Disease Modeling. Thank you, Mike.

DR. FAMULARE: Yes. Thank you all for the -- for the excellent description of what the report that we -- contains and sort of what it means to Public Health. I'm Dr. Mike Famulare. I'm one of the leads on COVID-19 epidemiology at the Institute for Disease Modeling. My focus is on transmission and surveillance. Just a little background on I.D.M. because I don't think we're as well known as my colleagues here.

I.D.M. uses advanced computer modeling and other analytic strategies to inform global efforts to eradicate diseases. Prior to three months ago a lot of our focus was on polio, malaria, typhoid, HIV, and now we're heavily also focusing now on COVID-19. I.D.M. is a research institute within -- inside of Global Good which is a collaboration between Intellectual Ventures and Bill and Linda Gates.

In terms of how we became involved in COVID, starting in January, we began to follow the data that was coming out of China and then other countries in Asia at that time and started providing analysis to W.H.O. and the Gates Foundation to better understand the pandemic potential. Now we're focused on providing the modeling and analytical support to local and state governments to inform decision making. Here also in the Seattle region we're supporting the Greater Seattle Coronavirus Assessment Network which is run by Public Health Seattle & King County.

In terms of what's brought us here today, as mentioned we have a new report looking at changing rates of transmission in King, Pierce, and Snohomish Counties. So, this is a continuation of our work on analyzing case and testing data from the Washington Disease Reporting System maintained by the Washington State Department of Health and looking at how changes over time and case data correlate with measures of physical distancing where we look at measures of physical distancing that are based on regional mobility data.

The key idea in this piece of work is that changes in the frequency of new cases each day can tell us about how transmission has changed in the past. We use mathematical models to make the connection between observed cases and testing data and the unobserved transmission dynamics that we don't see directly. And we study mobility data to see how well those changes in transmission are explained by changes in community behavior.

I think, you know, from at least from what I under -- I see in our report, our most important finding, is echoing what others have said, that reductions in person-to-person contact are continuing to make a difference in slowing the spread of COVID-19 in our region. For King County itself, we think that the reproduction number, which is a measure of how many people in each infected -- how many people each infected person infects continued to drop from around 2.7 in late February to near and possibly below 1 on March 25th.

We also saw similar changes in Snohomish and Pierce Counties and that -- reiterate what others have said here today, echoes the huge amount of progress that our society has made in reducing the transmission of COVID-19, but -- you know, I think echoing again the important conclusions that others have said, near and possibly below 1 does not -- for the reproductive number, does not equal out of the woods. Particularly from our perspective as transmission epidemiologists, the current epidemic in our region is in a position where if distancing measures are relaxed without other mitigation strategies in place, we can expect a quick rebound in the case count and the burden on the hospitals and the deaths. And so, it's really important that we look at these gains as real societal progress, but that we remain in a precarious position with respect to changes in our behavior that make transmission go back up again will quickly lead to a rebound in disease.

MR. SEINFELD: Thank you, Mike. Thank you for all our speakers. We'd now like to provide the opportunity for the media to ask some questions. I see a few of you are already in the queue. For others, if you want to get in the questioning queue, please press star 1 on your phone. And when the operator calls on you, please state your name and the media outlet you represent. Thank you.

And Operator, you can take it from here.

OPERATOR: Thank you, sir.

At this time, if you would like to ask a question, that is star 1 on your telephone keypad.

The first question will come from Sandi Doughton. Please go ahead.

MS. DOUGHTON: Hi all. It's Sandi Doughton from the Seattle Times.

The group of modelers at Harvard today just published a paper and gave a briefing on it suggesting that intermittent social distancing might be necessary through 2022, and saying that even if there is some seasonality to the virus that it probably won't make much difference because so many people remain susceptible. So, I'm wondering if you are envisioning kind of a similar situation here and how -- how are you envisioning transitioning out of the social distancing that's in place now? How would that look?

MR. SEINFELD: Sandi, do you want to target your question to one of the speakers?

MS. DOUGHTON: Well, I would start with Dr. Duchin.

DR. DUCHIN: Hi, Sandi. Thanks for that question.

MS. DOUGHTON: Hi.

DR. DUCHIN: I haven't seen the Harvard paper yet, but I know that that's been discussed there.

Can you hear me?

MS. DOUGHTON: Yes.

DR. DUCHIN: Oh. You know what? For some reason -- okay. You can hear me. Okay. Because something sounds very strange on my end. So, I'm glad you can still hear me.

In any case, so, how would we transition? Very carefully is the first answer. You know, we don't really know what to expect, but we do know that if we ease up on social distancing and people begin to come in contact more frequently, we will see more cases and so we need to do it very step-wising and carefully graduated release. Each one -- each step followed by an adequate period of observation that will allow us to understand if transmission is occurring, people are getting sick, seeing -- needing hospitalization and how -- how much of that is happening before we move to the next step.

And, you know, it's complicated because the time between infection and testing, you know, can be a week and then another week before hospitalization. So, it probably will be a few weeks after any change in the current recommendations before we can judge the impact of that. At the same time, you know, the theory is that the public health system will be able to do very extensive and comprehensive case investigations, contact tracing, and ensure isolation and quarantine of people very rapidly that would prevent ongoing transition.

So, that theoretically will balance any potential increase and that's sort of what we're trying to do; is be able to manage the outbreak, because I 100 percent agree with the fact that the virus isn't going anywhere and as Dr. Chen pointed out, the vast majority of us are still susceptible.

So, if we continue to have -- if we resume to have the type of contact we had prior to social distancing, this epidemic will rebound big time and we'll see lots of cases and perhaps a peak that was even larger than what we've already experienced. So, you have to be very careful and gradually understand what the effects of our easing of restrictions are before we consider going further. So, it's going to be a very slow and frustrating process for many because, you know, these distancing measures are quite difficult. And unfortunately, there's -- the next year is probably going to be a very challenging year for all of us.

OPERATOR: The next question will come --

DR. CHEN: This is Anthony Chen. Can I just add something to what Jeff said? Which is Jeff is absolutely correct on the public health side. We need to be prepared to do more testing, you know, disease

investigation, contact tracing, and isolation quarantine, but then at the policy side, there's going to need to be conversations.

And I think the -- you're already hearing people advocating for certain industries, you know, in business to re-open. I think what we are going to need to do collectively is not identify the industries up front, but what are the criteria. So, for example, safety might be a criteria. What's the ability for people to socially distance when they go back to work? Scalability might be another criteria, right? Can we gradually increase or decrease an activity, such as having restaurants move from carry out to gradually increasing seating before they move to full capacity open, you know, open seating? Whether it's a modifiable activity, for example. Can barbers limit how many chairs they are using and ask patrons to wait in cars until they're ready?

But I think it's also very important that we look at things like what's the equity and the impact. For example, how is this going to impact the low-wage employees who are kind of sitting on the press -- you know, they're about to fall off the cliff if they don't get some relief quickly. And we know, for example, industries like food service have a very large number of low-wage employees who often don't have any safety net.

So, as the governors on the West Coast talk about how they're going to align this, I would hope that we all participate in this conversation about what are the criteria we're going to use to ascertain what our -- you know, what we're going to relax first.

OPERATOR: The next question will come from Nick Popham.

MR. POPHAM: Hi there. Thanks so much. My name is Nick. I'm with KOMO-TV. My question is for Dr. Duchin.

Dr. Duchin, you said right now we aren't where you would like us to be. Can you explain kind of where you would want us to be right now? I know you kind of briefly touched on it, but if you could go more in depth of where you would like us to be right now collectively, not only here in Washington, but just you know, in the U.S.?

DR. DUCHIN: Sure. I'd like to have more confidence that we have more widely available testing so that anyone who might have symptoms of COVID-19 has access to testing so we have more confidence in our assessment of how many people are getting ill and what the trends are. You know, we really at this point still have limited insight into where testing is occurring and whether it's at -- we don't think it's really at the levels that -- the access is at the levels we need it to be.

All of this becomes more complicated, of course, because as we get the outbreak under control to some degree, you know, there are fewer people becoming ill, but we do want to make sure that the testing is widely available and we have good insight into where testing is available before we put too much stock into our -- our daily reports of disease.

But I would like to see, you know, the levels decreasing. We've been plateaued for about two weeks. And as Dr. Famulare mentioned, you know, we may be hovering around that magic number of one, which we'd like



to get below ideally. We want to put -- what we really need to do is suppress transmission as much as possible before we start to release, because the fewer cases we start with when we embark upon this intensive case and contact tracing, the more likely we'll be successful. So, we really want to -- I would like to see transmission suppressed further, if possible, and have better evidence of, you know, adequate laboratory testing so we can have confidence in where we're truly at.

OPERATOR: The next question will come from Carla Johnson.

MS. JOHNSON: Hi. It's Carla Johnson from the Associated Press. Thanks for taking my question. And this is for all three public health officers, and if you could go quickly around the table and tell us how many contact tracers you need, if you have plans to train that number of people and if you think there are digital solutions that could replace human contact tracing or supplement? Thank you.

DR. SPITTERS: I can go first. This is Chris Spitters in Snohomish County.

So, we -- right now, we have a shared workload with the state following up our cases. And we don't actively -- rare circumstances aside, what we're doing is interviewing the case, getting the epidemiologic information we need from them, instructing them about isolation and -- and making sure they're appropriately set up and behaving, if you will, at home in a way that protects others from transmission, and then talking to them about their contacts and then giving them a handout to share with those contacts, that directs those contacts to stay at home for two weeks and to, you know, call their -- call their healthcare provider if they get sick, and you know, further, stay away from people if they get sick.

That's what we're able to do right now. We've got about -- it's hard to add them all up, because it's parts of different people, but we've got two to three full-time people, plus a handful of people whom we've reassigned part of their -- part of their responsibilities to do this. So, we're somewhere on the order of probably four to five full-time equivalents working on this.

But you -- as you can imagine, to do a traditional, fully in-depth contact work where you elicit the names, the identifying information, the locating info, and then individually pursuing each one of those contacts, is a substantial increment up in the workload and that's why we triage back to, you know, delegating that to the cases. So, if and when we were to take that back over, you know, that can take a whole day to just do a case. Maybe you'll get -- on a good day, you'll get two or three cases done if it's a small number of contacts and everything is lining up, but if you've got problems reaching people or difficult people that you're working with, that can take a whole day just to do one case.

So, I think as I listened to Jeff make those comments, even with, you know, somewhat expanded staffing, we've got to wait until the morbidity is down under the roof of where we can operate to carry out that intense level of activity. Right -- right now, I don't even think we could do that right now. We still have to stick with the more triaged

approach that we're taking and kind of ride the wave of social distancing down a little bit further until -- until the number of cases being generated every day is within the ceiling of what we can achieve.

But I'll tell you right now, at 30 cases a day being reported, we -- we could not do that intense a level of contact notification and monitoring. It's probably got to be substantially less than that.

DR. CHEN: This is Anthony Chen. You know, it would be nice if we knew what the number was, but it's very difficult to estimate the number other than say a lot more than what we currently have. For example, we are having some outbreaks in our nursing and long-term care facilities. In some ways, those are a little bit easier because even though those are high-risk groups, we have these drop teams that go in and they're, you know, working with the staff and they're testing all the residents and all the staff. That's a little easier to reach people that way than what Chris described where, you know, we're calling people, tracking them down.

I know that we are doing this and some other counties are as well. We have mobilized medical reserve corps volunteers to be functioning as disease investigation teams. We know we are ramping up in Pierce County to prepare for the next stage that as soon as we can get testing much more available, that we're going to start pushing out testing which means we'll find more positives, which means we need to do more disease investigation and contact tracing.

The second part of your question, I'm not sure digital has to be the solution. I know a lot of news about the Apple/Google collaboration. I'm not sure that's really that helpful for us. However, there are existing solutions that we need to be innovative and use. So, for example, there's some low-tech solutions like using call centers and lesser trained people who can do some of the initial contact and tracing before handing off the higher level skills or the more difficult situations to, you know, more highly trained people. So, there are lots of other ways that we can do this. We just need to be able to do it.

Another example is, you know, public health for years has been doing for TB, tuberculosis treatment, where people need to take medications every day for, you know, half a year, a year. We have been doing this using, you know, video observed -- what we call DOT, and there are apps that are used on the phone, you know, smart phones where public health staff and the patients can communicate and track each other. So, that's an existing solution that's not big and fancy that could be used to track people as they follow through on isolation and quarantine.

So, I -- you know, I think there are lots of solutions. We just need to be innovative. One thing I do want to remind you about, the -- your first part of the question about how many we need is it's not just the number. It is the number over time. And I'm to remind you, you know, all of our public health folks, they've been working pretty much full-time since this pandemic broke out. So, even though it might look like we have a lot of people to call on, you have to realize that some of them are tired. Some of them need to be rotated out of their functions. And so,

we're -- we are planning on how we're going to address that, but unfortunately, you're not going to get a clean number out of me.

DR. DUCHIN: Hi. This is Jeff Duchin. Thanks Anthony and Chris.

So, the Center for Bio Security at Johns Hopkins and the Association of State and Territorial Health Officials recently put out a report which gives some ballpark estimates for the number of contact tracers we would need per 100,000 in the U.S. based on what was needed elsewhere in the world. Using those rough estimates, we'll need several hundred contact tracers in Washington State. Probably about a third of those or so in King County.

And in addition to that large number of contact tracers, we'll need people to work on isolation and quarantine, social support, and all the other wrap-around services that people may need when they're undergoing isolation and quarantine to ensure compliance. We'll also need a significant human resource management component to this informatic support.

And finally, you asked about digital apps. I second what Anthony said. You know, unfortunately, you know, no one has real experience with these. It's hard to know what will work, but anything that seems like it won't, you know, it may help and is not going to take away from our tried and true methods that we trust, I think should be welcome. So, we've been working with a number of app developers to try and help inform their development to make the product useful, but you know, it's very hard to evaluate and participate robustly in the middle of an emergency response. So, I sort of say the jury is out on the potential utility of the apps.

OPERATOR: The next question will come from Michael Crowe.

Please go ahead.

MR. CROWE: Hey there. Michael Crowe from KING5 here. I just wanted to ask -- I heard a lot in your statements -- this is mostly for Dr. Duchin, but I heard from all of you that there's a lot of uncertainty here, some uncertainty in the numbers, but are there any indications in this modeling that might start to give you a rough timeline on when social distancing could be relaxed here in these counties? Any sort of timeline at all.

MR. DUCHIN: Yeah. This is Jeff Duchin. So, I would say it gives us some confidence in saying not within the next month most likely, but it's hard to predict beyond that, because as I said, there still is a certain amount of caution we're using given the relatively limited amount of testing that's been done. Although, you know, the great work from the Institute for Disease modelers now with two reports really is reassuring that we're going in the right direction. [sic]

And as Dr. Chen pointed out, you know, we're a big -- you know, this is a big geographic region. So, even if one county suppresses transmission completely, if other counties are still seeing disease, it's -- the cases will recur widely. You know, cases will cross county

borders. They don't respect, you know, jurisdictional boundaries or county lines or even state lines.

So, we really all need to be prepared to, you know, recognize and rapidly respond to new cases even if our own personal, you know, local jurisdiction is well controlled, because we really, you know -- our -- as a country having to grapple with this together, because what happens, you know, anywhere really affects us all. And so, that's an additional challenge, making sure that as much of our state as possible, and, hopefully, our entire region of the country and hopefully our entire country are getting this virus under control before moving forward would be ideal.

But, clearly, you know, in our western Washington area, we'd want to be pretty much consistent with both our interpretation of where we're at, our confidence that we've suppressed the disease transmission adequately to start relaxing and then the measures that we're going to take to identify and respond to additional cases.

So, I would just say that based on the fact that we're getting close, but we're not there, particularly in some counties, not there more than others, I don't think this is realistic to expect any large change in policy for at least a month.

OPERATOR: The next question will come from Hannah Scott.

MS. SCOTT: Hello. This question is for all three public health officials if you can. Can you explain where exactly the breakdown in testing is at this stage? Is it just kits, labs, personnel? And what is being done to fix it so we do have a better picture?

Also, I just want to clarify, is there anything different with this virus at all; any weakening, or if we were to lift all the restrictions today, are we right back where we were on February 29th?

DR. DUCHIN: Okay. So, this is Jeff -- Jeff Duchin. The second part of your question is, are you wondering about has the virus itself changed?

MS. SCOTT: Yes.

DR. DUCHIN: Yeah. I have not seen any evidence to suggest the virus itself has changed in any significant way. The virus, you know, and other Coronaviruses are rather stable, compared to something like influenza virus. I don't think we should expect that the ability of the virus to cause disease is going to change in a meaningful way. I'd be happy to see it become less severe, but I don't have any reason to believe that's going to happen.

Remind me what the first part of your question was.

MS. SCOTT: -- lot of confusion out there, it's hard to report. I know there's a shortage of kits. Is there -- is there lab personnel issues?

DR. DUCHIN: Yeah.

MS. SCOTT: And what's happening to fix it?

DR. DUCHIN: Yeah. So, and I'll start and my colleagues can chime in. But just in a nutshell, initially the problem was just laboratories that could do the test. That is no longer the problem. We have regional laboratories that can do many tests. The problem currently or recently has been the actual materials needed to obtain the samples from the patients. They're called test kits. And they can include both, you know, like a Q-tip-like swab that's used to get the sample of respiratory secretions. And then also that swab then has to go into a liquid medium that gets transported to the lab and that is actually the substance that's ultimately tested.

So, those supplies have been, you know, very scarce. Recently, we were very gratified to find that our colleague at the University of Washington, Jeff Beard's laboratory was able to procure thousands of kits that he then tested and found to be viable and reliable test kits that he is now distributing both to the state and to the counties, and he believes that the availability of the swabs and kits will become increasingly easy over time. So, I think that's all good.

That's one particular type of test kit. There are multiple others that are available that we would also like to see increasing although I don't have as much certainty about them. I think that will also be happening as manufacturers ramp up testing -- I mean, their manufacturing capacity. So, there are some tests that can be done for, you know, just sampling from the nose, the -- sort of the external part of the nose which are quite easy to do and can be done at home and can be done on drive-through and don't require the healthcare provider to be in personal protective equipment, because that's been another bottleneck. The nasal pharyngeal swab test method requires a healthcare provider to have personal protective equipment. That's also in short supply.

So, as far as what's happening on that front, I wish I could be more optimistic. I think people are still struggling to find personal protective equipment, and that's going to be a limiting factor if -- particularly if the disease resurges in any meaningful way. But right now, it's -- it's very difficult. We don't have enough to meet the orders that were currently placed for our healthcare providers in the state.

DR. CHEN: This is Anthony Chen. I think Jeff covered the testing part well. I think, you know, we're moving towards improvement on that. But the second part of your question, I mean, just to put this in perspective, right? The number of cases that we have in Pierce County is 0.1 percent of our population. So, even if we were -- like, we missed nine out of ten cases because we couldn't test them, that's still 1 percent of our population.

And when we've got about 870,000, 880,000 people in Pierce County, that's how many more people that need to develop immunity before we can say we're done with this. And at a rate where we are getting, you know, at a plateau, we're getting about 30 to 45 positive cases a day, just think about how long that's going to take us to get to 870,000, 880,000 people here in Pierce County. And King County has got a very

different magnitude. So, yeah, if you lift this tomorrow, we're going to bounce right back and maybe worse than what we were before.

OPERATOR: The next question is from Gabriel Spitzer.

MR. SPITZER: Hello. Can you folks hear me okay?

MR. SEINFELD: Yes.

MR. SPITZER: Good. Thank you. This is Gabriel Spitzer from KNKX. I would like to follow up on the contact tracing and the personnel that would be required for that.

Dr. Duchin, you said that roughly, you know, we would expect to need several hundred human beings to do that work in Washington with about a third of them in King County. How does that compare with the number that we have already, and what is the plan to get to the number that we need? Would that require an additional funding source or what?

DR. DUCHIN: Yeah. So, those are additional to what we currently have. And, again, it's an estimate. You know, it's based on -- it's an educated guess based on what was required in other jurisdictions and what the State of Massachusetts. You know, the State of Massachusetts, I think their population is kind of similar to Washington State, around 7 million in Massachusetts. They hired a thousand, or they're aiming to hire 1,000 volunteers and paid workers. So, that's a lot more than several hundred, but I think our estimate is several hundred, through, you know, a decent calculus.

But yeah, so, what's happening, that's a great question. Clearly there's a funding challenge here. There's an organizational challenge, human resources, informatics. We are planning right now about how to do this. You know, a lot of this information just became available recently about sort of what exactly is going to be needed, the scale and scope, and ways to do that. We're working also with community partners to help see if there's volunteer agencies and others who can -- sort of non-profits who can augment the public health system in this activity.

So, I would say there's a lot of intent and planning going on to figure out the right way to do this. It has to be coordinated both with the public health system, with community partners, and with our elected leaders. So, I'm optimistic that in the next two weeks, it would be my preference or desire that we come out with some sort of a plan and can get moving on it.

DR. CHEN: This is Dr. Chen. I think that, you know, it's not -- well, it's not just current funding, right? I mean, even between the three counties you're hearing from today, we are all very different in terms of how much -- how many cuts we suffered in the past ten years and how much infrastructure there is. And, you know, even if the three of us are doing well and we're able to collaborate and do some sort of regional work, you have to remember that we've got some counties where literally, their health department is composed of people less than a handful of staff, right?

And so, the challenges in our more rural counties and the counties outside of the Puget Sound area are much higher and very different than the challenges that we face here. And so, as Jeff said, you know, we could be doing a great job here, but then if our neighboring counties outside of this region are not doing well, it will eventually come back and affect us. We've seen this in other countries. I mean, China is a great example where they're really concerned about imported cases now coming from other parts of the world.

So, it's more than just funding. It's a lot of the issues that Jeff described and also it's where -- where we currently are in each of the jurisdictions based on the many years of funding cuts and, you know, loss of infrastructure.

OPERATOR: And, ladies and gentlemen, we do have time for one final question. That question will come from Erica Barnett.

MS. BARNETT: Hi. This question is for the -- the county folks, particularly Jeff. The recommendations for social distancing remain that people isolate and stay at home, but of course there are thousands of people sleeping in homeless shelters. There was an outbreak in a shelter recently in San Francisco that impacted more than half the guests. I think it's up to 81 now. Will any of these -- of the counties issue new recommendations that might lead to more unsheltered people moving into hotels rather than sleeping in these large congregate shelters?

DR. DUCHIN: Thanks for the question. Yeah. We just -- we just recognized, as you know, recently a significant number of cases in community people living homeless here locally and they're increasingly recognized nationally. We had a CDC team here working with us and we're hoping to issue some guidance through their MMWR process in the next week or so. But I can tell you that even before the CDC team arrived and before we recognized this outbreak, we were taking steps here to what we're calling de-intensifier to, you know, create more distance between shelter residents.

And I do think that's a really important strategy for all communities to think about trying to decrease crowding as much as possible and at the same time educate, you know, the shelter operators about steps that they can take to minimize the risk to their residents to how to recognize cases, how to engage Public Health, their local Public Health Department and rapid evaluation and assessment of possible COVID-19 in the facility, and ideally, whenever possible, enhancing access to hygiene and sanitation facilities.

But your -- the basic part of your question was, you know, is there something that can be done to sort of disaggregate people and sort of, you know, help them get more space and less crowding. And that's a very important consideration and one that, you know, we've been working on both here at the city -- the mayor has done a significant amount of work on that as has the county executive. These have been priorities of both of our local elected officials for a couple of months preceding the recognition of the first case.

DR. SPITTERS: Yeah. Jeff, likewise in Snohomish County, the unsheltered population, although we haven't had any apparent outbreaks or -- and we're not yet -- haven't seen any signal of severe illness on a systematic basis, not seeing lots of hospital discharges, for instance, among the unsheltered, it's certainly a concern. It led to, you know, guidance for decreased density and, you know, closing of some shelters and decreased capacity at others to permit that distancing. And then widespread use of hotel/motel vouchers at an unprecedented rate for Snohomish County Human Services.

So, you know, that's the effort. You know, and like any of these interventions, they -- you know, they do have side effects. So now, many of these individuals who were also accessing services through those sheltering facilities aren't as able to do that. So, even that is -- you know, one of our local human services folks I think used the word Band-Aid. It's definitely a good disease control tool to disaggregate and spread people apart. On the other hand, it moves them away from services that, you know, in the long run they need.

So, it's a real challenge to find the balance. And, you know, I think part of -- as things go forward, one of the challenges will be is how to, you know, start reopening up services back to those individuals; keeping in mind that many of the service providers come from voluntary organizations which tend to have an older age profile, and that's been one of the contributing factors to decreased availability of such volunteers serving the unsheltered or food banks and that kind of thing. So, it's all these -- all these things are connected.

OPERATOR: Ladies and gentlemen, we've reached the allotted time for the question and answer portion of the conference call. We'd like to turn it back over to Keith Seinfeld for any closing comments.

MR. SEINFELD: Thank you, everyone, for being on the call. I'm sorry we did not have time to get to all the questions. Thank you to our speakers for joining us today as well. If you haven't already, I'll put a plug in, Public Health Insider for more information about the work that King County is doing to address this pandemic. There are, of course, many resources available on our website, on the Pierce County website, the Snohomish County website and the state's as well. Thank you again. And thank you for participating.