UNITED STATES DISTRICT COURT

FOR THE NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

CERTIFIED TRANSCRIPT

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CALVARY CHAPEL SAN JOSE, a California Non-Profit Corporation; PASTOR MIKE MCCLURE, an individual; SOUTHRIDGE BAPTIST CHURCH OF SAN JOSE CALIFORNIA dba SOUTHRIDGE CHURCH, a California Non-Profit Corporation; PASTOR MICAIAH IRMLER, an individual, Plaintiffs, vs. GAVIN NEWSOM, in his official capacity as the Governor of California; TOMAS ARAGON, M.D., in his official capacity as the Acting California Public Health Officer; SANTA CLARA COUNTY; SARA H. CODY, M.D., in her official capacity as Santa Clara County Public Health Officer; MIKE WASSERMAN, in his official capacity as Santa Clara County Supervisor; CINDY CHAVEZ, in her official capacity as a Santa Clara County Supervisor; DAVE CORTESE, in his official capacity as a Santa Clara County Supervisor; SUSAN ELLENBERG, in her official capacity as a Santa Clara County Supervisor; and JOE SIMITIAN, in his official capacity as a Santa Clara County Supervisor, Defendants.	Case No.: 20-cv-03794-BLF

DEPOSITION OF
SANTA CLARA COUNTY'S PERSON MOST KNOWLEDGEABLE PURSUANT TO RULE 30(B)(6) - SARAH RUDMAN, M.D.

DATE: Friday, August 19, 2022

TIME: 9:13 A.M. to 2:39 P.M.

LOCATION: Remote Via Zoom Videoconference

REPORTED BY:
Michelle D. Knowles,
CSR No. 8979, RPR, CRR, CRC, CCRR
File No. 22-0819

Q. Oh, you have multiple.
Well, let's -- medical.
A. Oh.
Q. What type of medical degree do you have?
A. So it's a doctor of medicine, an M.D.
Q. And where did you get that degree?
A. At Cornell.
Q. Okay. What other degrees do you have?
A. So I have my Bachelor of Arts, and then I have a master's in public health.
Q. And where did you get your master's of public health from?
A. At University of California, Berkeley.
Q. Do you have -- when you got your doctor of medicine, did you focus on epidemiology?
A. Not at that point in my training.
Q. Okay. So when in your training did you focus on epidemiology?
A. As part of both my infectious disease fellowship, which is the medical training that came after my residency, and in my master's of public health, which was really a degree in epidemiology.
Q. And where did you do your fellowship regarding infectious diseases?
A. At University of California, San Francisco.

Q. And when did you do that?
A. Let's see. That would have been 2013 to 2015.
Q. And when did you get your master's in public health?
A. In 2015. I think 2014 to 2015.
Q. When did Santa Clara County first implement its contact tracing system related to COVID?
A. There were several iterations of it. I would say very early, as early as our first case in January 2020, we had a small manual system for contact tracing.

Very quickly, within the next several weeks and certainly by early March, we were overwhelmed and didn't have a system for contact tracing just because of the volume of cases compared to the systems set up to respond to them.

And then we reimplemented a new system, I believe, at mid-to-late May 2020.
Q. Let's start with the first system.
A. Please.
Q. Well, let's start, actually, when -- when did the County first learn about a COVID-19 case in the County?
A. End of January 20- -- no. Sorry. I'm -- I'm misremembering when our first case is.

My memory is end of January 2020. It may have

been January 20th or 27th, but I don't remember exactly.

Q. And so, at this time, you had a manual system. Is that what you said?

A. Uh-huh. Yes.

Q. Okay. How did that man- -- how was that manual system applied?

A. Sure.

Q. Can you explain to me that manual system?

A. So a -- a unit -- a standard practice for response to communicable diseases of public health consequence is to have public health employees trained to speak with the case, confirm that that individual does meet criteria as a case for whatever disease -- in this case, COVID -- try to understand where they may have gotten sick, and then try to understand who they may have exposed during the period we understand them to be contagious.

Q. Uh-huh.

A. So, in January 2020, when we had one and then two and then five cases, there were individuals who would call up a case and then -- originally, on a piece of paper -- write down the name of every person we thought they may have come in contact with during the period we thought they were contagious. And that information then may have been transcribed into

individual Excel documents that were stored on our shared secure drives.

And then the -- the final step of that contact tracing is then calling those individuals we believe could have been exposed to notify them of that exposure, see how they're feeling, and direct them to other resources as appropriate.

Q. So do the county attorneys have access to those Excel documents?

A. Yes. My understanding is yes.

Q. And do you know if the attorney -- attorneys reviewed those documents in response to our office's document requests?

A. I don't know.

Q. Okay. So after January, let's say February --

A. Uh-huh.

Q. -- of 2020, what was the contact tracing system then?

A. My best memory is sometime during that period, we would have stopped contact tracing entirely.

Q. And why is that?

A. Because, at that time, the resources we had to call people who were getting sick were -- were far overwhelmed by the number of people -- actually, I guess that was more into early March -- overwhelmed by the

number of people who were getting sick. Yeah.

Q. So is it possible that you -- the County may not know the amount of people who could have been infected in February of 2020 because you guys didn't have the resources to -- to trace or investigate COVID-19 cases?

MR. WALL: Objection to the extent it calls for speculation.

You can answer the question, Dr. Rudman.

THE WITNESS: Sure.

Well, I want to say I -- my opinion is there have been many points throughout the pandemic, including today, when we are likely significantly undercounting how many cases there are. And the reasons why have evolved throughout the pandemic: whether it had to do with access to testing, especially early on; whether folks get tested if they're feeling sick or have been exposed, as well as some of the nuances of the reporting system for us receiving reports and being able to respond to them.

BY MS. GONDEIRO:

Q. Okay. So, to be clear, in February, as you can recall, the County wasn't implementing any type of contact tracing system because they were just so overwhelmed?

MR. WALL: Objection. Misstates testimony.

THE WITNESS: I would -- my best memory is, actually, it was in March when we stopped attempting to contact trace every case. I believe in February we still had a low enough number of cases we were able to do that, call each case and speak with them.

BY MS. GONDEIRO:

Q. During February, were you still using your manual system?

A. Yes, as best I remember.

Q. And how many employees at that time were helping with this manual system?

A. I don't remember exactly.

Q. Do you recall, at that time, feeling like you didn't have enough employees to help with the manual system?

A. I know we reached a point somewhere between February and March where we didn't have enough people to reach out to every case. I don't remember at what point we made that determination.

Q. Okay. But it was somewhere in between February or March?

A. That's my best memory, yes.

Q. February to March?

A. Yes. It could have been more like middle of

March.

Q. But it could -- but -- okay.

So it could -- so could it have been anywhere -- it could have been anywhere from March -- or no.

Could it have been anywhere from February to the middle of March?

A. Yes, that's my best memory.

Q. Okay. So, in March, what type of contact tracing system did the County implement?

A. So, in March, I would describe us as not implementing a system specifically for contact tracing but continuing to use a State system for case -- documentation of cases. And it wasn't until, I believe, May that we implemented a new system for contact tracing.

Q. So in -- from March to -- actually, can you describe to me the State system --

A. Sure.

Q. -- you were using?

A. So the State, prior to the pandemic, has been using a system called "CalREDIE," which is an acronym -- and I apologize; I can't remember what it stands for -- that allows two methods of documenting people who are sick with a disease of public health importance: One is

that laboratories can electronically submit positive test results directly into the system in an automatic way, and the other is that public health employees can manually input information they have about somebody who is sick with a disease of public health importance.

That CalREDIE system is the means by which we comply with our regulatory requirements to collect information about public health im- -- diseases of public health importance and report them to the State.

And so that was the system we were utilizing prior to COVID for other diseases and throughout the pandemic, including until today, to document cases.

The period I was describing in February and March, I know we continued to use that system to document what we did know about cases, but it did not include what I would consider contact tracing, which is the information about people who might have been exposed to those cases.

Q. Okay. Gotcha.

Did the State of California implement this CalREDIE system throughout the entire COVID-19 pandemic?

A. Yes. It was up and running throughout the entire COVID pandemic and able to receive information about COVID cases certainly as early as January 2020. I'm not sure exactly when.

Q. Did they have any other type of contact tracing system that they applied during the COVID-19 pandemic? And if so -- oh, first, I'll just have you answer that question.

A. Yes.

Q. Did they have another type of contact tracing system?

A. Yes, they did.

Q. And when -- when did they apply that different system?

A. So that different system, which was called "CalCONNECT," was the one I alluded to that went live around May -- the end of May 2020.

Q. So both the County and the State of California started using CalCONNECT in May --

A. Yes.

Q. -- of 2020?

A. Yes.

MS. GONDEIRO: Okay. Can you please pull up Exhibit 30?

(Exhibit 30 was marked for identification.)

MR. WALL: Annette, can you drop a copy into the chat, too, so that I can pull up a copy on my end?

EXHIBIT TECHNICIAN: I think I can, yeah. But I'm in Ignite, so let me just see if I can share that

into the chat.

MR. WALL: And then if it's dropped into the chat, Dr. Rudman, you should be able to pull up a copy.

THE WITNESS: I can scroll through?

MR. WALL: Yeah.

EXHIBIT TECHNICIAN: Let's see here. Hold on.

BY MS. GONDEIRO:

Q. Dr. Rudman, does this PowerPoint look familiar to you?

A. I apologize. What I'm seeing on my screen, it looks like a chat window; so I can't -- I saw it for a moment, but I can't --

EXHIBIT TECHNICIAN: Sorry. Let me get out of there.

THE WITNESS: Oh, okay.

MS. GONDEIRO: Yeah, that's much better for me too.

EXHIBIT TECHNICIAN: Okay. Do I need to zoom in more? Is that better?

MR. WALL: Mariah, can you drop copies of the exhibits into the chat? Because I want the -- the witness has the right to review the documents --

MS. GONDEIRO: Yes.

MR. WALL: -- and I would like to as well.

MS. GONDEIRO: I -- I don't know how to -- I

don't know how to do that. I sent them over to -- to --

MR. WALL: If you have copies on your laptop, you can just open the chat and drag and drop them in, and it will publish them to the group.

EXHIBIT TECHNICIAN: And I can do that.

MS. GONDEIRO: Can you -- can you do that? Because I'm tech- --

EXHIBIT TECHNICIAN: Yeah, but I'm going to get out -- yeah. Let me just get out of this real quick, and then I'll do that.

MR. WALL: Thank you. I appreciate it.

EXHIBIT TECHNICIAN: No problem.

Let me just stop sharing for a second here.

I apologize. Just -- okay.

I'm so sorry. I took it out of that folder, and now I'm just trying to look for it. So...

Okay. So I'm going to have to -- I'll get it from the email again. Just give me one second.

MR. WALL: Thank you, Annette. I appreciate it.

EXHIBIT TECHNICIAN: No problem.

There you go.

MR. WALL: Oh, great. Thank you.

EXHIBIT TECHNICIAN: Now, let me get -- let me go in to share the screen also with this other one.

MR. WALL: Okay.

Dr. Rudman, you should be able to download and open it from the chat. If you have any issues, let me know.

EXHIBIT TECHNICIAN: Okay. Is that too zoomed out, or is that okay for everybody on the screen?

MR. WALL: It's okay for me.

MS. GONDEIRO: Yeah.

THE WITNESS: I haven't actually been able to open it, though; so it's -- let me see.

MR. WALL: The way it works -- I don't know how familiar with Zoom --

THE WITNESS: Oh, I have to save it and then open it. I've got it.

MR. WALL: Yeah.

THE WITNESS: Thank you.

Okay. Thank you. Yes, I've got it open, and I can scroll through. Thank you.

BY MS. GONDEIRO:

Q. Dr. Rudman, does this PowerPoint look familiar to you?

A. I don't remember the specific PowerPoint, but I'm familiar with the information that's in it.

Q. Okay.

MR. WALL: Let the record reflect this is part

of a larger presentation.

THE WITNESS: Ah.

MR. WALL: But go ahead, Ms. Gondeiro.

BY MS. GONDEIRO:

Q. Okay. So it's -- this PowerPoint is titled "Case Investigation and Contact Tracing."

Do you know when this PowerPoint would have been put together?

A. I don't remember specifically, but at the time we were proposing the changes described here would have been around May 2020.

Q. So it says here, on the first page, "Implemented new technology to increase the efficiency, consistency, and effectiveness of our investigations as we scale."

Was that new technol- -- what did that new technology refer to?

A. So it -- it -- I don't remember exactly. It could have been CalCONNECT.

Q. Uh-huh.

A. We were also trying to work with a different company called "Dimagi" to create something similar on our own, and so it could have been alluding to that one instead.

Q. But was it -- but when you refer to

"technology," it was either Dimagi -- did I pronounce that right?

A. Yes.

Q. -- Dimagi or CalCONNECT?

A. That's -- yes. To the best I remember, yes. I don't remember any other system this could have referred to.

Q. What is Dimagi?

A. So similar to what CalCONNECT did for us eventually, it was designed to be a system -- and it may have been -- the company was called "Dimagi," and I think the system was called "CommCare" -- was designed to allow us to pull information from CalREDIE about who had tested positive for COVID, assign each case out to an investigator electronically as opposed to having to hand them a piece of paper, and have them enter information from an interview with the case into the platform.

And then that information would include the names and contact information for anyone they might have exposed while they were contagious, and then those considered contacts would also be assigned out to investigators to notify those contacts that they had been exposed.

Q. Did the County ultimately decide at this time

to not use Dimagi and instead use CalCONNECT?

A. Yes. I know that we went live with CalCONNECT at the end of May. I don't remember exactly at what time we made the decision to make that transition.

Q. Okay. Why did the County choose not to use Dimagi?

A. The best I remember is that the benefits of switching to the CalCONNECT system were: (1) that it was already integrated with CalREDIE, which we were required to use and which was already set up to ingest automatic information from laboratories; (2) it was supported by the State and as best we anticipated at the time.

And what did happen is it was adopted by, I believe, all, if not nearly all, California jurisdictions, which also allowed us to, you know, pass a case between jurisdictions if somebody turned out to actually live in a neighboring county or to notify a neighboring jurisdiction if we -- a case in our county had exposed a contact in their jurisdiction. So it allowed interoperability throughout California.

Q. So, just to be clear, you believe that CalREDIE was adopted by all jurisdictions in California?

A. CalCONNECT.

Q. Or CalCONNECT.

A. Or nearly all.
Q. Do you know who created CalCONNECT?
A. Who created it? My best understanding is a large team across California. Department of Public Health gave input to create it, but we were also offered the chance to give input to the State of California about changes needed that they would utilize to change it or adopt it -- adapt it.
Q. But, I mean, I'm assuming CalREDIE had to have been invented by someone; correct?
A. I'm sorry. Can I ask you to clarify if you mean CalREDIE or CalCONNECT?
Q. I'm sorry.
A. Confusing to us too sometimes.
Q. Let's go back to CalCONNECT.
A. Yes.
Q. I'm getting the two mixed up.
Who invented CalCONNECT?
A. I don't know. What I do understand is it is built on a platform made by the company Salesforce, and so I think it was an existing data product for housing data of any kind that was then adapted with input from the State Health Department to serve the contact tracing purpose.
Q. Uh-huh. Do you know if CalCONNECT was invented

by multiple people?

A. I -- I don't know.

Q. Was it invented by anyone -- was it invented by a public health officer?

A. Can I ask you to clarify what you mean by "invented"?

Q. Who created it? I mean --

A. Uh-huh.

Q. -- someone had to have had the idea to put together this technology; right?

A. Right. So, yes, my best understanding --

MR. WALL: Objection to the extent it calls for speculation.

But you can answer, Dr. Rudman.

THE WITNESS: Okay.

So -- yeah. My understanding is the technology existed -- and this is my personal understanding because I don't work for either Salesforce or the State: That the technology existed because it was technology for collating data and sharing it with people in a secured, protected way.

And then the State -- I don't have knowledge who had the idea or refined the idea or executed the idea, but it was the State of California Public Health Department who said we will use this technology for this

purpose and gave input to set it up to be used for that purpose.

Does that answer your question?

BY MS. GONDEIRO:

Q. Yes.

A. Okay.

Q. That's helpful.

Do you know why other jurisdictions in California decided to use CalCONNECT and not Dimagi?

A. I don't know the decision-making process in other jurisdictions.

Q. So before May, before you guys implemented CalCONNECT, just to be clear, you didn't really have a -- a -- or did you have a technology platform to help you investigate cases?

A. For that brief period just prior to CalCONNECT, we did have the option of using Dimagi.

Q. Did you use Dimagi?

A. I believe we were live in it for about two weeks, so for a very short period.

Q. Okay. So before Dimagi, though --

A. Uh-huh.

Q. -- were you primarily using a manual system to --

A. Yes.

Q. Okay. And so that manual system, then, was put in place from the end of January to April?

A. Yes. But as I tried to say, we effectively stopped using it for the purpose of what I consider contact tracing, which is documenting the name and information for everyone who has been exposed and trying to reach them, when we reached that threshold where we felt that we couldn't keep up with the volume needed for that. And, again, my best memory is I think that was early March, but I don't recall exactly.

Q. So then what did you start using after March?

MR. WALL: Objection. Asked and answered.

THE WITNESS: I'm sorry. Do I --

BY MS. GONDEIRO:

Q. If you stopped using the manual system that you're referring to, what did you use after March?

MR. WALL: Objection. Asked and answered.

Dr. Rudman, if I don't tell you not to answer the question --

THE WITNESS: Okay.

MR. WALL: -- you should just answer after my objection.

THE WITNESS: Okay.

MR. WALL: I apologize.

THE WITNESS: That's okay.

Yeah, we -- I would say we were not doing contact tracing, as I define it, from whenever that period is in, I think, March until May.

BY MS. GONDEIRO:

Q. Okay. So back to the PowerPoint. The first PowerPoint in this Case Investigation and Contact Tracing, it reads, "Currently, we have capacity to investigate 25 new cases a day."

Was that because the County had this new technology --

A. The --

Q. -- the CalCONNECT?

A. It -- it may have been, in part, because of that, yes.

Q. Well, what would have also contributed to the County being able to investigate 25 new cases a day?

MR. WALL: Objection. Vague as to time frame.

This is an excerpt from a presentation that has a date.

MS. GONDEIRO: Yes. I think earlier Ms. Rudman had testified that she believed this -- this PowerPoint presentation was put together probably around May.

BY MS. GONDEIRO:

Q. Is that correct, Dr. Rudman?

A. That's my best memory of when these types of

decisions were either happening or coming to fruition.

If you're -- am I able to ask what the date is, like, you know, if there are pages from this PowerPoint I can't see? Was there a date on it that would help me answer the questions?

Q. Okay. I don't think there's a date on this PowerPoint, but to the best of your recollection, you believe it was sometime around May?

A. I think so.

MR. WALL: There is a date on this PowerPoint. It's at page 44 of the County's production.

MS. GONDEIRO: Okay.

MR. WALL: I can tell you what it is, if you want, but if you don't want -- if you want the witness to testify without the date --

MS. GONDEIRO: Yes. If you know the date, I'm --

MR. WALL: Sure. It's a presentation to the County of Santa Clara Board of Supervisors meeting, May 5th, 2020.

MS. GONDEIRO: Okay.

THE WITNESS: Okay. Thank you.

BY MS. GONDEIRO:

Q. So I'm going to just try to go back and repeat my last question.

A. Uh-huh.

Q. So what enabled the County at this time, in May, to be able to investigate 25 new cases a day?

A. My best memory is it may have been a combination of the Dimagi system to document into, the data that would already be coming into CalREDIE via the mechanisms I described, and the assignment of staff to help with those investigations.

MS. GONDEIRO: Can you please scroll down?

Oh, wait. No. Up. Up a little.

BY MS. GONDEIRO:

Q. So on the next page --

EXHIBIT TECHNICIAN: Down further?

MS. GONDEIRO: No. That -- this is perfect.

EXHIBIT TECHNICIAN: Okay.

BY MS. GONDEIRO:

Q. -- it reads, "The expanded team will likely include approximately 1,000 team members, but we will be continuing" -- "continuously assessing staff needs," and then it lists different -- or additional -- additional employees.

So were -- was this expanded team put into place to help investigate more cases every single day?

A. Yes.

MR. WALL: Objection. Assumes facts.

And, Dr. Rudman, if you would give just one second after the question so I have a chance to make my objections and we don't talk over each other and make the court reporter's job impossible.

MS. GONDEIRO: Sure.

How about, just to be smooth here, can you just repeat my question -- or can you read off my question?

Then, Robin, you can object.

MS. GONDEIRO: Thank you. Thank you, Mariah.

(Record read.)

MR. WALL: Objection. Assumes facts.

And you can answer, Dr. Rudman.

THE WITNESS: Yes, we -- we put in place an expanded team to respond to increasing cases.

BY MS. GONDEIRO:

Q. But just to be clear, this expanded team was not put in place -- was not in place prior to May?

A. Correct.

Q. What is the role of the program and project managers?

A. So at the time that I remember this information being shared, our vision for that role was overseeing everything from the onboarding of a contractor and a cadre of volunteers to support this work, vetting them, training them, supervis- -- or supervising their

supervisors as well as setting up the systems -- in this case, the transition into CalCONNECT -- that would allow this team to operate. And -- and we did carry that out. Whether it was three program or project managers varied throughout the period that we were doing this work.

Q. Did the County have three project managers starting in May, or did they ultimately employ more project managers?

A. People with the exact title "project manager" would have varied throughout the, you know, two years after this.

At the time, my best memory is there were two people with the title of project manager, and we ended up utilizing the contractor described here. Heluna Health had their own project manager who was sort of a complement to that leadership structure.

So at that time, yes, there were three, and then the exact roles evolved later.

Q. What was the role of the team clinicians?

A. That also varied, to some extent, throughout the use of this Case Investigation and Contact Tracing infrastructure. In general, we felt that there -- there could be a wide number of questions that could come from the cases or contacts that we were asking the staff to call that would be outside their expertise. And we

would want somebody with anywhere from a nurse to a physician level of clinical knowledge to be able to answer those questions and ensure they're accurate.

Specific use cases I remember we had in mind at this point was, for example, helping decide whether somebody's symptoms, in the context of their medical history, meant that they could leave isolation after being sick or not or whether somebody's symptoms, as a contact, were worrisome that they should test or not. Those types of clinical advice or interpretation that was beyond the scope of our -- our general contact tracers.

Q. Were the team clinicians volunteers, or did you have to employ 140 new clinicians?

A. So my best memory is our clinician team never actually reached anywhere near 140. This was our best estimate at the time of what the breakdown of different roles would look like. The actual eventual team was somewhat different; and, in particular, the team clinicians were many fewer. I don't remember exact numbers but on the order of 20 to 40 at various times.

Q. Okay.

A. That was a mix of volunteers, reassigned County staff members who were designated as disaster service workers and assigned to this role, and I believe there

may have been a number of individuals hired to serve in this role.

Q. Were the project managers volunteers?

A. The -- the individuals I can remember who served in the project manager role, no. Two were county employees redirected to this work; and then one, as I mentioned, was a contractor for Heluna Health, served as project manager on their side.

Q. What is Heluna Health?

A. As best I understand, a -- an entity that serves as a -- what's the word I'm looking for? -- public health staffing agency. So I was familiar with them prior to this because there were specific individual roles at the State Health Department that were filled by Heluna Health staff. But this was my first direct interaction with them as an entity, and we utilized them to -- as a contractor to hire and supervise both the -- a large number of the contact tracer team members as well as the leads.

Q. So the County paid Heluna Health to --

A. Yeah. Yes.

Q. -- help them with the system?

A. Yes.

Q. Where is Heluna Health located?

A. I actually don't know where their sort of base

of operations is.

Q. Do you know who directs Heluna Health or who is in charge of Heluna Health?

A. I -- I don't know the ultimate leadership structure. Yeah, we had specific leaders that we were working with in the organization.

Q. Who were the specific leaders in the Heluna Health organization that you were working with?

A. Our primary contact was someone named Peter Dale, and I believe his title was chief project officer. And then our other primary point of contact was when they hired that project manager shortly after initiating the contract, and her name was Sara Stahlberg.

Q. Sara -- sorry. Can you repeat the last name?

A. Last name is Stahlberg, S-t-a-h-l-b-e-r-g.

Q. Did any -- are you aware if anyone else -- any other local agencies used Heluna Health or relied on Heluna Health throughout the COVID-19 pandemic?

MR. WALL: Objection. Vague. And to the extent it calls for speculation.

THE WITNESS: Can I ask you to repeat the question, please?

BY MS. GONDEIRO:

Q. Are you aware if any other local agency in the state of California relied on Heluna Health during the

COVID-19 pandemic?

A. I know that others did but not to what extent. For example, I was recently interacting with a physician who mentioned that she was hired by Heluna Health to support San Francisco's COVID response, but I don't know how indicative that might be of other jurisdictions' interactions with them.

Q. And who was that physician?

A. Oh, her name is Dr. Yeuen Kim.

Q. Doctor what?

A. Her last name is Kim, K-i-m, and first name is Yeuen, Y-e-u-e-n.

Q. And where --

MR. WALL: Mariah, we've been going for about an hour.

MS. GONDEIRO: Okay.

MR. WALL: So if we could take a break soon.

MS. GONDEIRO: Sure. This is the last question.

BY MS. GONDEIRO:

Q. Where does she work again?

A. Oh, I actually don't know where she's working right now. It was an interaction in which I was aware that she had previously worked for Heluna --

Q. Okay.

A. -- in collaboration with San Francisco.

MS. GONDEIRO: Yes, we can stop here.

MR. WALL: Thanks, Mariah.

THE WITNESS: Thank you.

(Recess taken from 10:18 a.m. to 10:35 a.m.)

MR. WALL: Mariah, we're ready to go back on the record whenever you're ready.

MS. GONDEIRO: Yes, I'm ready.

Court Reporter, can you please remind me where we left off?

THE REPORTER: Sure.

(Record read.)

MS. GONDEIRO: Okay.

BY MS. GONDEIRO:

Q. Dr. Rudman, did Santa Clara County hire 680 case investigators on or around May of 2020?

A. No.

Q. Do you know what the number was?

A. So we eventually got to a total population -- you know, members of these teams, between the leads and the investigators, approaching 900 over a couple of months. But it was a mix of Heluna Health employees --

Q. Okay.

A. -- redirected existing County employees, redirected State employees who were being utilized in

their disaster service worker capacity and lent out to various counties, and a group of volunteers.

Q. Okay. Did the County have to pay for additional workers to conduct their case investigations?

A. Yes, via their contract with Heluna Health.

Q. Did the County hire 68 additional new data entry support staff --

A. No.

Q. -- on or around May of 2020?

A. No.

Q. How many?

A. We both discovered we didn't need that many people devoted purely to data entry. I think at our peak, over the next year, we probably had up to 25 or 30 people supporting various elements of data entry and data cleaning. But that, again, was a mix of, I think, mostly redirected County staff and potentially some Heluna staff or redirected State workers.

Q. Okay. Did the County hire two epidemiologists?

A. My best memory is we received one epidemiologist funded by the CDC Foundation. So this was not hired by the County but by an outside foundation.

Q. Who is in charge of the CDC Foundation?

A. I don't know.

Q. Why did the CDC Foundation decide to hire an epidemiologist for this county?

MR. WALL: Object to form.

THE WITNESS: I -- I don't know the internal processes of CDC Foundation, but my understanding is we were one of a number of locations in the country where they hired and sort of assigned epidemiologists or other roles to support our activities.

BY MS. GONDEIRO:

Q. Okay. So they were -- the CDC Foundation was particular in who they assign epidemiologists for?

A. I -- I --

MR. WALL: Object to form.

THE WITNESS: Oh.

I don't know how that process worked.

BY MS. GONDEIRO:

Q. Okay. Did the County seek external funding to help fund their contact tracing system on or around May of 2020?

A. Seek external funding? I don't believe so, no.

Q. Well, the County had to hire additional staff; correct?

A. Yes, with the distinction that they were technically not County staff but contractors via Heluna.

Q. Okay. Was your -- was the County's contact

tracing system that began on or around May of 2020 used as a template for other governmental entities in California?

MR. WALL: Object. Object to form.

You can answer.

THE WITNESS: I don't know.

BY MS. GONDEIRO:

Q. Okay. Did other local jurisdictions seek Santa Clara County's advice as to how to implement their contact tracing system?

A. Yes. My -- I don't remember specific instances, but I know that, for example, we were asked to -- to share at a statewide discussion how our system worked.

Q. Okay. When was that statewide discussion?

A. I don't remember.

Q. Do you know the general time frame of when that discussion would have occurred?

A. No. I can't remember.

Q. Was it in 2020?

A. It may have been late 2020 or early 2021.

Q. Okay. So I'd like you to kind of just explain to me how the case investigation works.

So what happens when the County receives a reported COVID-19 case -- or what happened starting in

May of 2020?

A. Sure. So those reports usually came in to CalREDIE via the preexisting system where laboratories can send a positive test result for a certain disease into CalREDIE. We had staff related to that data entry team who would review that positive test, confirm that it was somebody who lived in Santa Clara County and that it was a new incident of COVID-19 and not somebody who was testing for a second or third time after their diagnosis, and then transfer that data into CalCONNECT. This was via a system the State had set up that allowed the two databases to talk to each other.

That case coming into CalCONNECT would then be assigned by that group of team leads to an individual -- first to a team and then, by their lead, to an individual case investigator who would, using the contact information that came out with that case report, try to contact the case and say, first, "Are you aware that you've been diagnosed with COVID-19?" assess whether they had immediate, especially emergent, health needs, and did they need assistance getting health care or other, you know, support services like emergency housing or food or rental support.

We would ask a series of questions to try to collect basic information about their demographics and

the circumstances of their COVID case, and then we'd collect information on anyone they may have had close contact with during the period we think that they were contagious.

All of that information was documented in CalCONNECT, and then we'd conclude that call by offering them the instructions for isolation to help prevent further spread of their disease while they're infectious.

Then the contact information that was generated -- so let's say I said I was in contact with Mr. Wall during the period I was contagious. There would be a contact record created for Mr. Wall with his phone number. That would be assigned to a different investigator who would call the contact, notify them that we believe that they were exposed to an active case of COVID, provide them the instructions and recommendations for quarantine when those applied, and similarly offer them resources and information to help respond to any immediate health or safety concern.

Q. So going back to the first case investigator --

A. Uh-huh.

Q. -- who was tasked -- or who was assigned to talk to that person who -- who had COVID-19.

A. Yes.

Q. What types of questions did that case investigator ask the -- the person who was infected with COVID-19?

A. The set of questions varied throughout the pandemic. In general, they would always verify the name, date of birth, sex and gender, address to make sure it was really someone who lived in Santa Clara County.

And then, throughout the pandemic, we collected a range of information on things like were they experiencing symptoms, when did the symptoms start, verifying when they had tested positive, and, you know, the severity of their illness, had they been hospitalized, had they had certain complications.

And then again, varying throughout the pandemic, there were sometimes questions asked about places they might have gotten sick, especially settings that might have had large groups of people together. That might include their workplace, their school, or any large gatherings they might have been part of.

And then, as I mentioned, collect -- and sort of the primary focus was collect names and contact information for anyone they might have had close contact with during the period we believed they were contagious. And that best understanding of what is close contact

evolved during the pandemic as well.

Q. Were these lines of questionings memorialized in any document or training material at any point before May of -- or May of 2020?

A. I'm sorry. They wouldn't have been in any documents prior to May of 2020.

Q. Okay. During May of 2020, was there any training material?

A. Yes. Yes.

Q. Okay. Was there any other type of document where these questions would have been memorialized?

A. So the -- the main place the questions lived was built into the CalCONNECT system.

Q. Okay.

A. Part of what a case investigator would see when they were assigned a new case is it would pop up, "You've got a new case," say, "Dr. Sarah Rudman is your case to call," and when they open the system in CalCONNECT, it would show the information we'd already received, including a phone number, but also the list of questions that we were hoping for the case investigator to collect.

Q. So as the case investigator is gathering all of this information, how did the County ultimately determine where they believed that person became

infected with COVID-19?

MR. WALL: Objection. Assumes facts.

THE WITNESS: So the County actually usually did not -- I'm not sure I have your words exactly -- confirm the location where somebody contracted COVID both because that was not the primary focus of this contact tracing effort but, instead, to focus on who might not yet be sick but be exposed and respond to those folks' needs and safety but also because of the -- the limita- -- several limitations in collecting information and understanding how -- where somebody might have gotten sick.

BY MS. GONDEIRO:

Q. So the goal of the contact tracing system that was implemented in or around May of 2020 was -- was more of a preventive measure. You wanted to prevent more people from getting sick; is that correct?

A. Yes.

Q. But I guess I'm a little bit confused because you ultimately have traced cases to various industries; correct?

A. I actually would say no, or at least it's extremely rare, especially among the thousands and millions of cases we've -- well, thousands -- hundreds of thousands in Santa Clara County, to have actually

traced where an individual got sick.

So -- so, yeah, I would disagree. I would say -- so, no, for the vast, vast majority of cases, we did not ever trace, meaning, I think as you're using it, come to an agreed understanding of where they contracted COVID.

Q. Okay. Did the County, starting in May of 2020, keep track of the different reasons why someone may have contracted COVID-19?

A. Can you say what you mean by reasons they contracted?

Q. Okay. I'll be more specific.

Starting in May of 2020, did the County keep track of when they -- when they were investigating cases, did they ask questions like, "Were you wearing a mask?"

A. There were various times in the pandemic where we asked that question; but, in general, it was not actually a standard question asked of all cases. And for the majority of the pandemic, when we were doing contact tracing, we often did not go into that level of detail.

Q. Why would the County not ask whether that person who contracted COVID-19 was not wearing a mask?

MR. WALL: Objection. Assumes facts.

Incomplete hypothetical. And to the extent it calls for speculation.

But, Dr. Rudman, you can answer the question.

THE WITNESS: So there were times and situations when we would have assessed whether someone was wearing a mask and times when we didn't, and the reasons why we might not have might have been varied.

But I would reiterate that the primary objective of those conversations was prevention of future cases. So we did, to that end, for example, counsel people on the importance of wearing masks once -- now that we knew that they were sick or had been exposed and were likely to get sick.

BY MS. GONDEIRO:

Q. Starting in May of 2020, can you describe the circumstances where the County was direct- -- or the case investigators would have been directed to ask whether that person was wearing a mask?

A. The only instance that comes to mind right now where I remember directing -- or knowing that staff members were directed to ask about masking, sort of retrospectively, was during a period -- I think it was around November to Jan- -- November 2020 to January '21 when we were specifically trying to focus -- trying to understand better about where people were going in the

period before they got sick.

And in that process, we had a subset of investigators with a subset of cases who were asking, "For each of those places you went or interactions you had, do you remember whether you wore a mask or not?"

Q. Okay. Prior to November of 2020, did the County case investigators ask if someone was wearing a mask who may have contracted COVID-19?

A. There may have been specific questions at various times that were followed up by whether someone was masked, but I don't remember exactly how that was embedded into the case investigation interview script or at what times it might have been utilized or not.

Q. Can you remind me? You are the -- you were the -- you were in charge of the COVID-19 contact tracing system; correct?

A. Yes. For the period from June to -- June 2020 to December 2020.

Q. Okay. During that time period, did you direct contact investigators at all times to ask whether someone was wearing a mask who may have contracted COVID-19?

MR. WALL: Objection. Asked and answered.

But you can answer the question, Dr. Rudman.

THE WITNESS: Thank you.

I -- I don't remember giving that specific general directive to the entire team or for all cases.

MS. GONDEIRO: Okay. We can go on to the next exhibit.

EXHIBIT TECHNICIAN: Moving down or to 31? The next page, you mean?

MS. GONDEIRO: Oh, sorry. 31.

EXHIBIT TECHNICIAN: 31. Okay.

(Exhibit 31 was marked for identification.)

MS. GONDEIRO: I'm going to try to get you out early, Ms. Rudman.

THE WITNESS: Thank you.

EXHIBIT TECHNICIAN: Let me go ahead and take a moment just to put the -- put that into the chat box also.

MR. WALL: Thank you.

EXHIBIT TECHNICIAN: Yes. So I don't mess it up here, I should do that first.

You should have it.

THE WITNESS: I have it open. Thank you.

EXHIBIT TECHNICIAN: Yeah. Let me just put this up here.

MS. GONDEIRO: Are you able to put it on the screen?

EXHIBIT TECHNICIAN: Yes, I am.

MS. GONDEIRO: Okay.

EXHIBIT TECHNICIAN: I am, yes. I'm sorry. Just having to get to the right server here.

There we go. Let me just share it.

Okay. There you go.

BY MS. GONDEIRO:

Q. Ms. Rudman, did you put together these Santa Clara County Daily Case Counts graphs?

A. No.

Q. Who -- who put these graphs together?

A. There was a team called "the situational analysis branch." And so, best of my understanding, they are responsible for putting together documents like this one and so I assume this one as well.

Q. Okay. So starting in or around March -- or May of 2020, did the -- did the County put together a situational analysis branch for the specific reason of recording daily case counts in Santa Clara County?

A. No, that's not quite right.

Q. Okay. When did the County put together the situational analysis team?

MR. WALL: Objection. Out- -- I think it's outside the scope.

But you can answer the question, Dr. Rudman.

THE WITNESS: My best memory is there's been

some version of the situational analysis branch since potentially as early as February of 2020, but I don't remember exactly.

BY MS. GONDEIRO:

Q. What was the -- did -- was the situational branch a branch of the Santa Clara County Public Health Department?

A. This also would have evolved during the pandemic. There may have been portions at which this -- there was a situational analysis branch within the Public Health Department's response and a portion of which it might have been the entire County's response had its -- a situational analysis branch with individuals who -- whose daily work reported to the Public Health Department.

Q. Okay. So I'm just trying to understand what these different words mean here. So the light -- the light yellow is "LTCF-Resident."

Can you tell me what that represents?

A. That's an abbreviation we use for long-term care facility.

Q. Okay.

A. And so, presumably, residents in long-term care facilities.

Q. Okay. So then the yellow in the graph

represents the percentage of cases that were traced to residents in long-term care facilities?

A. I would say no. These were individuals who were, at the time of their diagnosis, residents in long-term care facilities. The assessment of whether -- whether we would say that they were traced to or got sick because of that status is more complicated and may not necessarily apply.

Q. Okay. What does "Other Outbreak" encompass?

A. Again, depending on the time of this -- and I assume maybe late August 2020 based on the date here -- I -- I don't recall exactly what definition we might have been using or the situational analysis branch might have been using for this graph. They may have been cases who did not live or work in a long-term care facility but had been linked to a cluster in some other setting -- any other setting, I believe.

Q. What do you mean by "cluster"?

A. So this would be where, even in the absence of being able to prove, for example, that somebody got sick in a school or at their workplace, there were so many cases associated with their school or workplace without specific other more likely places they got sick that we presumed and clustered them together as most likely considered an outbreak.

And at various times throughout the pandemic, there were specific definitions of the number of cases that would meet a threshold as an outbreak, usually set by the State Public Health Department.

Q. So the number that was -- that determined whether it was an outbreak changed throughout the COVID-19 pandemic?

A. Yes.

Q. Why is that?

A. I can't speak to the exact decision-making for California Department of Public Health when they were setting these thresholds, or, at times, I think CDC was making recommendations about these thresholds.

My sort of professional understanding is that, depending on the setting, there may be different likelihoods that people could get exposed outside the setting versus inside it. So, for example, in a long-term care facility, for a resident, most residents in long-term care facilities rarely leave that setting.

So when you have a small number of cases in that setting, it's likely that most of them got sick there --

Q. Uh-huh.

A. -- and we can feel pretty confident saying there's likely spread happening in this setting. Or

sometimes we knew that someone had literally not left the setting at all for the entire period when they could have gotten sick, so we feel quite confident saying they got sick here.

For other settings like a school or a worksite, people come in and out of it, and you may need a higher number of cases associated with that setting to feel confident there's spread happening there as opposed to it's just a group of people who just as likely might have gotten sick at home but happen to work together.

Q. Okay. And what did "Community," which is the dark blue -- what did that encompass?

A. My best memory from this time is it would have been everyone else.

Q. Okay.

A. So, as I was describing before, it was incredibly hard and much more rare than not that we would actually feel like we could attribute a case to a particular setting. And so here, the "Community" bucket is describing everyone else where we don't know or weren't able to ascertain where they were likely to get sick or they weren't specifically known to be part of a cluster under investigation.

Q. Okay.

MS. GONDEIRO: Okay. We can move on to

Exhibit 32.

(Exhibit 32 was marked for identification.)

BY MS. GONDEIRO:

Q. Dr. Rudman, does this graph look familiar?

A. Not specifically, no.

Q. Okay. Do you know who would have put together a graph that reported cases based off of job titles in a restaurant?

A. Very generally, the situational analysis branch was responsible for creating visual representation of our COVID data, but I don't know specifically for -- for this analysis.

Q. So the -- this graph states different job titles. Were these -- did the County have similar graphs like this that depicted COVID-19 cases based upon business types or business settings?

MR. WALL: Objection. Vague.

THE WITNESS: I'm aware of some graphs the County had that represented COVID cases by business types.

BY MS. GONDEIRO:

Q. Does the graph -- does the County have a graph similar to this that keeps track of the reasons for whether someone may have contracted COVID-19? For instance, they were not wearing a mask or they were

singing or they were in a large gathering.

A. I'm not aware of any graph or document that would fit what you just described.

Q. Why would the County -- why did the County not think to keep track of the different reasons why someone may have contracted COVID-19?

MR. WALL: Objection. Assumes facts. Calls for speculation.

THE WITNESS: So I would say the County actually put extensive effort in trying to understand where populations, in general, were getting sick or why, modifiable things that people could do to prevent getting sick.

MS. GONDEIRO: Uh-huh.

THE WITNESS: A lot of the information that we had to base those understandings on was not specifically coming from our own data collection but from national publications, peer-reviewed journals, you know, expert advice and sort of CDPH, California Department of Public Health, and CDC recommendations.

But I would say that the County -- well, what I would say is that we recognized and I, in my role overseeing the contact tracing work, recognized that it was incredibly difficult, if not often impossible, to understand what single modifiable factor caused someone

to get sick or could have prevented them to get sick.

MS. GONDEIRO: Uh-huh.

THE WITNESS: And, in general, it wasn't going to be possible to attribute every illness to a single modifiable factor; and, instead, that's why we focused on advising multiple layers and methods of protection for everybody.

BY MS. GONDEIRO:

Q. I understand why it would be difficult to understand, like, the reason why someone got COVID-19.

But regardless of that, did the County have or document anywhere -- keep a record for each individual who contracted COVID-19, whether that person was singing or whether that person was wearing a mask or whether that person was in a large gathering or whether that person --

A. Uh-huh.

Q. -- was outside or inside, those types of questions?

MR. WALL: Object to form.

THE WITNESS: Do you mind if I just ask you to repeat that question?

BY MS. GONDEIRO:

Q. Yes. I'll be more specific, and I'll just go down the line.

A. Uh-huh.

Q. So earlier you testified that you did not specifically direct contact tracers to, at all times, ask whether the person who contracted COVID-19 wore a mask; is that correct?

A. I don't remember giving that general directive, correct.

Q. Okay. Did you ever give a directive to the contact tracers telling them to keep track of the individuals who contracted COVID-19, whether they were in an indoor setting where they were singing?

A. The nature of my directives would have been to conduct the interview as described in CalCONNECT, and what questions they would have asked would have been varying throughout the pandemic based on what is in CalCONNECT.

But to your question, I think there were periods when one of the questions included, "Did you attend a gathering?" I don't recall whether there were any follow-up questions that assessed things like whether singing was happening at that gathering.

Q. Okay. At what point during the COVID-19 pandemic were contact tracers directed to ask whether they were in a gathering?

A. I believe the question was included in the

CalCONNECT script and sort of list of questions I think as early as May and I think maybe continues to this day to be there. There were periods during the pandemic where we created lists of highest priority questions --

Q. Uh-huh.

A. -- that, again, were much more focused on preventing spread of COVID.

Q. Uh-huh.

A. So focused on who might you have exposed and preventing complications of COVID: "Do you need assistance with health care right now?"

So during those periods, especially during the winter of 2020 to 2021, I believe folks may have been directed to ignore that question or to not spend time focused on it in order to prioritize other questions.

Q. Okay.

A. So I think throughout the entire existence of the contact tracing, folks were generally directed to complete the interview that included that question but, at times, were advised to not focus on it or skip it if they needed to focus on other questions.

Q. Okay. Beginning on or around March of 2020, how often did you consult with Dr. Cody regarding the locations of COVID-19 cases?

A. Consult with her regarding the locations? Can

I ask what you mean by consult with her regarding the locations?

Q. Did you -- did you guys have periodic meetings with each other, starting in March of 2020, where you were discussing where you believed COVID-19 cases were occurring?

A. Not specifically. We did have recurring meetings to discuss -- and not just the two of us but various groups of members of the COVID response -- during which one of the topics may have been at almost any time where -- where we thought COVID transmission was happening, either locally or where we understood nationally or internationally new data to suggest where it could be happening.

Q. When did you start having these discussions with Dr. Cody and others?

A. The discussions in which we might have dis- -- like, one of the items that might have come up would have been where transmission is happening, could have started as early as January of 2020. Yeah, we had near-daily briefings for almost the entire pandemic. And if at any point anybody had a question about or a specifically notable example of transmission in a setting, that might have become a topic of discussion.

Q. Starting on or around January, when these

discussions started happening, did the County use this information to target their COVID-19 orders towards the business sectors where they believed to be the most risky?

MR. WALL: Objection. Beyond the scope of the designated topics for this 30(b)(6) witness.

Dr. Rudman, you can answer the question.

THE WITNESS: Okay. So I wasn't the ultimate decision-maker in what the orders entailed, and I don't know when -- when I was asked for particular information, when Dr. Cody might have specifically utilized it.

MS. GONDEIRO: Uh-huh.

THE WITNESS: Actually, can I ask you to repeat the question to see if I have anything to add to that?

BY MS. GONDEIRO:

Q. So I was asking, starting in January of 2020, the information that you guys were gathering regarding -- through your contact tracing efforts, did you use this information to target the -- the County COVID-19 public health orders towards the business sectors where you believed were the most risky?

MR. WALL: Same objection.

THE WITNESS: So, yeah, I'll reiterate. I was not the decision-maker for how the County orders were

structured or any of the details within them. And I don't know, of any of the information I provided, how it would have been specifically used to create those orders.

But, in general, sort of my professional knowledge tells me that when we make decisions about what activities are -- certainly, to the extent of a legal order, are going to be protective for health, it may include anything from local understanding of where disease is being transmitted but also national data or published data or expert opinion or sort of pure scientific data about how we understand the disease to spread that might be extrapolated to -- to various settings.

So any of those may have been utilized in some of the decision-making.

BY MS. GONDEIRO:

Q. During the COVID-19 pandemic, did you ever have discussions with anyone on the County's enforcement team as to where you believed the COVID-19 outbreaks were occurring?

A. It was not usually within my role to talk directly to the enforcement team. Yes, I think I can remember one or two instances where I was sort of covering for other team members where I may have spoken

to them directly about specific clusters or locations of concern.

Q. Sure.

But, generally, it wasn't part of your duty to have periodic conversations with the enforcement team for Santa Clara County --

A. No.

Q. -- as it related to COVID-19?

A. No, it was not.

Q. Why -- why were you not -- why was it not part of your duty to talk with the enforcement team regarding where you believed COVID-19 outbreaks were occurring?

MR. WALL: Object to form.

THE WITNESS: Why was it not part of my duty? Well, I'll explain it. My duties were to create, build, sustain, you know, adapt the system that performed the contact tracing mission I described, which was collect some basic data, put them into the centralized database of CalCONNECT around cases, and then focus on getting those folks who were sick the resources they need, understanding who was exposed, and getting those contacts to be aware of their exposure and understand steps to protect their health.

In the context of building that system, there were various times in which -- well, there was not a

direct link between creating that system and the enforcement process. Not being part of this process, my understanding that that enforcement process was complaint-driven, was not specifically driven by the contact tracing data collection.

And so because I was not part of the complaint process, I wasn't part of the chain of conversation of notifying enforcement or working with them.

BY MS. GONDEIRO:

Q. At any point during the COVID-19 pandemic, did you have any role in -- as it relates to COVID-19 enforcement?

A. Not -- yeah. Not that I can think of, no.

MS. GONDEIRO: Okay. We can go to Exhibit 33. What time is it?

(Exhibit 33 was marked for identification.)

BY MS. GONDEIRO:

Q. Dr. Rudman, does this graph look familiar?

A. Generally, yes. I am familiar with the fact that we generated graphs like this one. I can see it's Slide 4, and I don't know Slide 4 of what --

Q. Okay.

A. -- presentation.

Q. But, generally, you recall reviewing graphs like this one that display the disparities of COVID-19

cases by race/ethnicity?

A. Yes.

Q. Did the County put together these graphs throughout the entire COVID-19 pandemic?

A. Yes.

Q. Okay. So starting at the beginning of the COVID-19 pandemic, was there a pattern where Hispanic/Latinos were reporting more COVID-19 cases than other races and ethnicities?

A. It's -- the beginning of the pandemic is not reflected on this graph, but my memory is --

Q. Yeah.

A. -- yes, from fairly early on, there was a pattern in which the number of cases being reported among Hispanic and Latinx residents was higher than among other races and ethnicities.

Q. Okay. Do you recall the pattern being, starting at the beginning of the pandemic, that African-Americans were reporting more COVID-19 cases than White ethni- -- the White? It says "White" here. Caucasians.

A. I actually don't -- I want to amend my prior sentence that I don't remember exactly at what point rates may have been higher or case numbers may have been higher among Hispanic and Latinx residents. So it

was -- it was fairly early in 2020 and clearly predating this graph, but I don't remember how early.

As to your second question, I also don't remember specifically when we started seeing rates among African-American community members to be higher than among White community members. I do see from this graph, and it matches what I remember, that that was certainly the case by the winter of 2020.

Q. Okay. Did that -- did the trend continue through early 2021 as well where you saw more COVID-19 cases or a higher rate of COVID-19 cases with African-Americans than Caucasians?

A. In general, yes, but I -- I don't remember specifically how much that may have fluctuated or if it was always the case during the --

Q. Okay.

A. -- well, the rest of -- or up until now.

Q. Do you recall it being the pattern that the rate of COVID-19 cases was greater among Hispanics and Latinos in early 2021 than Caucasians?

A. It -- can you say what you mean by "early 2021"? It actually -- I think it fluctuated fairly early on.

Q. Early 20- -- from January, let's say, to March of 2021.

A. Oh, '21. Thank you.
Q. Yeah, '21.
A. Yes, I do recall during that period that the rates among Latinx community members was higher than White community members.
Q. Did the County ever do an analysis or -- to help them determine why the rate of COVID-19 cases was greater among African-Americans and Hispanics than Caucasians?
A. You know --
MR. WALL: Object to form. Outside the scope.
But you can answer the question, Dr. Rudman.
THE WITNESS: Yeah. I'll say it wouldn't have been my purview to request such an analysis or an analysis for that purpose.
To the extent -- again, more in my professional opinion, what our understanding was and what data we might have been trying to gather around this disparity, it would have relied as much on our understanding of how disease is spread, how COVID is spread, and the living and working conditions of Hispanic and Latinx community members compared to White community members that we might have been relying on to understand this disparity.
But, yeah, I can't think of a specific analysis or study that would fit what you described.

BY MS. GONDEIRO:

Q. Was anyone in the County Public Health Department in charge of trying to understand why the rate of COVID-19 cases was greater among African-Americans and Hispanics than Caucasians?

MR. WALL: Object to form and object to the question as outside the scope of the designated topics for this witness.

I'll just -- for shorthand purposes, I'll just object on the -- as to outside the scope going forward, and that will be the objection.

But, Dr. Rudman, you can answer the question.

THE WITNESS: Okay.

But I'm not aware of any role that I understand to be dedicated to or include in their scope that specific purpose.

BY MS. GONDEIRO:

Q. Do you understand why the rate of COVID-19 cases among African-Americans and Hispanics was greater than Caucasians?

A. I think I have some general understanding of, like, agreed-upon expert opinion that likely contributed to it.

Q. What is that expert opinion?

A. So I think some of the things we know

contribute to spread of COVID may include dense housing, sort of number of people in a household; ability to shelter in place or reduce movements outside the household as it was either required or recommended throughout the pandemic; and some factors based on things like just age of a population and, therefore, how likely they were to be in school or working or leaving the home or not.

And my understanding of the -- some of those same demographic features of our Latinx and African-American communities in Santa Clara compared to White and Asian communities would suggest that we may see, for example, denser housing or more people in a household in the average Latinx household than the average White household or more people in service professions who were required to leave the home to work during the pandemic in Latinx and African-American households compared to White households, or there may have been more likelihood, for example, to be able to adapt to working fully from home.

So I think -- I understand and I believe the sort of expert opinion that those were factors that impacted populations generally, and then I -- I believe that they played out here in Santa Clara County.

Q. No, that makes sense.

And so, just to be clear, you mentioned one of the factors was the ability to shelter in place; right?

A. Uh-huh.

Q. When you said that, did you mean that the Afri- -- a lot of people in the African-American and Hispanic communities -- their work requires them to be outside the home?

A. Yes, that was what I meant by that statement.

Q. Uh-huh.

A. Or work or family care requirements.

Q. Uh-huh. What efforts did the County make to mitigate this disparity among COVID-19 rates?

A. Uh-huh. The --

MR. WALL: Objection. Outside the scope.

You can answer, Dr. Rudman.

THE WITNESS: Again, from -- it was not specifically my role to oversee that work, but from meetings I joined as a participant, discussions I joined as a participant, my understanding is this was a major focus of our activities throughout the entire pandemic.

And some of those activities would have included the County -- not specifically the Public Health Department but the County setting up increased access to testing in communities that were disproportionately Latinx and African-American; setting

up vaccination sites, once that became available in 2021, in, again, neighborhoods that may have had more Hispanic or Latinx community members; and also trying to ensure that all of the resources, whether it was information or health care or testing or eventually vaccination, was available in Spanish and then, finally, working with community groups to try to share information and access to resources, especially with any population that was being disproportionately impacted, including Latinx and African-American communities.

BY MS. GONDEIRO:

Q. Throughout the COVID-19 pandemic, did Santa Clara County experience more COVID-19 cases in South San Jose than North San Jose?

A. Can you spec- -- I believe so, in general, but I believe that varied throughout the pandemic.

Q. Okay. As you recall, when did the County experience more COVID-19 cases in South San Jose than North San Jose throughout the COVID-19 pandemic?

A. I don't know exactly when that inflection point would be, but I believe it -- the pattern increased throughout the pandemic such that that was more so towards the later we got compared to very early.

Q. So later throughout the COVID-19 pandemic, you saw a trend where more COVID-19 cases were being

reported in South San Jose than North San Jose; is that correct? Or -- yes.

A. I believe so.

Q. I think I accidentally also limited it to North San Jose.

Was there a trend where you saw more COVID-19 cases in north -- in south Santa Clara County --

A. Ah.

Q. -- than north Santa Clara County throughout the COVID-19 pandemic?

A. So I would reply to say the rates -- because the population in South County, especially sort of Gilroy/San Martin area, is less dense.

Q. Uh-huh.

A. But the rates -- the proportion of the population being impacted by COVID was higher in South County than North County, which I'm considering north of San Jose. So exclusive of San Jose.

Yes, that's my understanding, is that South County, for the majority of the pandemic, has been experiencing higher rates than North County, but that also varied throughout the pandemic.

Q. But, in general, did south Santa Clara County experience higher rates of COVID-19 throughout the COVID-19 pandemic?

A. Higher than other parts of the County and less -- and lower than some.

Q. Okay. Why did south Santa Clara County experience higher rates of COVID-19?

MR. WALL: Objection. Beyond the scope.

You can answer the question, Dr. Cody.

THE WITNESS: I -- I don't know, but I -- I would really just hypothesize that some of the same features I described as impacting Latinx community members could come into play with describing disparities affecting South County versus North County, some of those housing conditions as well as working and family care responsibilities.

BY MS. GONDEIRO:

Q. Sure.

So I'm actually not familiar with Santa Clara County or as much as you are.

Are there more Hispanics and African-Americans in south Santa Clara County?

A. I actually don't know. Not than all areas of the County, but I -- I don't know with respect to the African-American population. That may be true with respect to Hispanic/Latinx population.

MS. GONDEIRO: Okay. How long have we been going?

MR. WALL: About another hour. We could use a break if you want to take one.

MS. GONDEIRO: Yeah, let's take a break.

(Recess taken from 11:35 a.m. to 11:52 a.m.)

MS. GONDEIRO: Are we ready?

MR. WALL: Dr. Rudman?

THE WITNESS: Yes. Thank you.

MS. GONDEIRO: Are we on the record?

THE REPORTER: Yes, we're back on the record.

MS. GONDEIRO: Okay.

Can you please turn to Exhibit 34?

(Exhibit 34 was marked for identification.)

BY MS. GONDEIRO:

Q. Dr. Rudman, do you see the exhibit?

A. Yes.

Q. Okay. Do you recall reviewing weekly special investigation summaries?

A. Yes, I do.

Q. Okay. Did you assist in putting together these weekly special investigation summaries?

A. In general, no.

Q. Who was in charge of that?

A. The ultimate responsibility would have lived with the situational analysis branch. I was sometimes asked for feedback on the final report: Would we like

to see different information in the future?

Q. Okay. Were these special investigation reports always sent to you?

A. To the best of my knowledge, yes, I was always one of the recipients.

Q. Okay. And who else were they sent to?

A. I may not know everyone, and it also varied throughout the pandemic. I believe Dr. Cody received these. We sometimes had somebody in the title of EOC director, emergency operations director, for the entire county, coordinating public health as well as other county response to COVID. They may have received this.

Q. And who would that person be in the Emergency Operations Center?

A. It would have varied throughout the pandemic. Most recently, it was Miguel Marquez, our chief operating officer. I'm actually not -- not sure whether they received these, but they may have.

Q. May have. Okay.

A. And then I believe individual team members on either the contact tracing team or the special investigations team would have received these as well.

Q. Every time you received these weekly special investigation summaries, what did you do with this information?

A. It varied depending on my role throughout the pandemic. Is there a specific time frame?

Q. At the -- let's say from the time you were in charge of the contact tracing system, which was from June to December of 2020, what did you do with these special investigation weekly summaries?

A. At that time, I mostly didn't have an action I was responsible for in reaction to this except to say that sometimes one of the categories of information we would collect would be things like, "Do you live in a long-term care facility or another congregate setting? Do you attend school, or do you" -- "Do you work, and what is your workplace?"

And so there may have been times where I, you know, sort of used this to feed back to my understanding of -- of what data my team were collecting that was going into the CalCONNECT database and, in part, being used to -- to generate this information.

Q. Okay. So I want to direct you to Table 1, which reads the "Number of Cases by Residential Congregate Setting Type."

A. Yes.

Q. In the section where it says "Cumulative," did that include the total number of hospitalizations up until October 21st or just for that week of October 15th

through October 21st of 2020?

A. I don't recall specifically, but my -- and I wasn't responsible for the code that was used to generalize -- to create this document or the decision-making that was used to build that code.

Purely based on my review right now, I believe it would have been cumulative from the beginning of the pandemic --

Q. Okay.

A. -- but limited by our knowledge of who was hospitalized and whether they were associated with any of these types of facilities.

Q. Okay. And then right of the "Cumulative," it says "Weekly New."

Would that have included the new hospitalizations in the week of October 15th through October 21st, 2020?

A. I -- I don't know whether that would have been people who were previously known to be cases associated with these entities and newly hospitalized or cases who were newly found to be associated with these entities who we also knew to be hospitalized.

My best understanding reading this now is it's the latter, cases that we've just become aware of that are associated with these facilities who also happen to

be hospitalized at -- we also know to be hospitalized based on the information we have at that time.

Q. Okay. And so on the first column, it says "LTCF." Can you remind me what that stands for?

A. Long-term care facilities.

Q. It has a number -- a total number of hospitalizations.

Are those numbers -- were those numbers traced to long-term care facilities, or were those numbers just representative of people in long-term care facilities who were hospitalized?

A. So I did not directly oversee the team that generated these specific data, but my best understanding is that we would have included any patient who was both a resident of a long-term care facility at any point during their illness, either the period where -- before they got sick, when they might have been exposed, through the period where they were sick, whether or not we had any evidence or believed that they got sick in their facility.

MR. WALL: Mariah, can you hold on for one second? There's some noise near me in the office. I just need to tell people to be quiet for a sec, and then I'll be right back.

MS. GONDEIRO: Sure.

MR. WALL: Thank you. I appreciate that.

Go ahead, Mariah.

MS. GONDEIRO: Can we scroll down to Table 6?

BY MS. GONDEIRO:

Q. Okay. Table 6 reads, "Number of worksite investigations by Setting Type."

In the column where it says "N," does that represent the total number of worksite investigations since the beginning of the pandemic until October 21st of 2020?

A. Not quite. My understanding is that would be the total number we were aware of and were gathering in this data repository and had sort of categorized as an investigation.

Q. From what period was this data gathered?

A. Ah. Oh, my best understanding is it would have been from the beginning of the pandemic, but our ability to gather this type of data fluctuated especially early in the pandemic.

Q. Okay.

A. There may have been very limited data gathering at all in the beginning.

Q. Okay. Does this table represent actual cases that were traced to these setting types or people who reported COVID-19 cases from these setting types?

A. First, I'll say, you know, we've -- I've responded as you've used the word "traced" previously that that was -- that's not quite how we'd use the term or used contact tracing. Again, we are focusing much more on that forward prevention of cases.

So if you're using it to mean attributed to transmission in these locations, no, that's not what this describes. This describes clusters or investigations of clusters either reported by these entities or these types of entities or where individuals have indicated that their -- their work location is these entities.

Q. Okay. So in the next column where it says "Active Investigations," does that represent the active investigations for the week specified in this Special Investigations Weekly Summary?

A. That's my best understanding, yes.

Q. Okay. So, based off of this table, the most reported settings were construc- -- was construction; is that correct?

A. I would amend that to say the setting in which there were the most cases reported among employees by those entities that had high enough numbers among them to be considered a cluster and need investigation was among construction --

Q. Okay.
A. -- overall throughout the entire pandemic.
Q. Why were -- why was construction the highest?
A. I think, in short, I don't know. And I think it's likely due to a number of complex factors that this was the most reported or identified loca- -- type of location that resulted in investigation.
Q. What type of factors do you think contributed to sites reporting -- construction reporting so many COVID-19 cases?
MR. WALL: Objection. Beyond the scope.
But you can answer, Dr. Rudman.
THE WITNESS: Okay.
I think some of the factors that played in here, to help us -- or that led to us identifying what we thought might be a cluster needing investigation was in what employment setting people were getting tested, which was sometimes impacted by whether they were required to be tested as part of their job, which would therefore make them more likely to come to our awareness if they were positive than people who worked in settings that didn't require testing, as well as what work settings had more people working in them as opposed to fewer, what work settings required people to come together physically versus not.

The regulations for reporting by the work settings also varied throughout the pandemic such that, you know, I believe -- you know, various entities such as Cal/OSHA required employers to report among employees but not necessarily among patrons of a retail setting, for example. And then further data gathering also was limited by whether those entities complied with either those reporting requirements or recommendations.

MS. GONDEIRO: Uh-huh.

THE WITNESS: So should an entity choose not to tell us that they're aware of a cluster of cases or a case among an employee, we usually had no way of knowing that.

MS. GONDEIRO: Okay.

THE WITNESS: So what this reflects to me is a combination of construction, you know, manufacturing, retail, at this time in this past week on this report, having all of those factors. Their employees were both getting sick and getting tested and notifying their employers, and their employers were notifying us, and they were disclosing full information to us about the -- the numbers of employees getting sick and the details of those enough for us to identify that an investigation was needed.

/////

BY MS. GONDEIRO:

Q. Okay. Throughout the COVID-19 pandemic, what business or setting types were the most -- were the most reported COVID-19 cases?

MR. WALL: Object to form.

You can answer, Dr. Rudman.

THE WITNESS: Yeah.

Maybe -- well, I'm sorry. Can you ask the question again?

BY MS. GONDEIRO:

Q. Yeah. Sorry.

A. That's okay.

Q. It wasn't a good question.

During the COVID-19 pandemic, what business types reported the most COVID-19 cases?

A. I don't know the answer to that sort of for the entire pandemic. I would rely on documents like this one to help me answer that.

But it would often, again, be based on the regulatory requirements to report cases, the likelihood -- or frequency with which people go to those or work at those locations and their ability to comply with those reporting regulations such that, for example -- you know, we sort of share the total numbers here, but the numbers for schools and long-term care

facilities, I think if we were applying it on a case-by-case basis, might have been much higher.

And that may be because at times in the pandemic, you know, almost every child was in a school, and almost every school was required to report cases and was engaged in doing so.

Q. Uh-huh.

A. So there may have been periods, for example, where the highest number of case reports were coming from schools.

Q. Gotcha.

A. And so it was often reflective of those regulations and just the likelihood that somebody was affiliated with that type of entity.

Q. Okay.

MS. GONDEIRO: I actually don't need Exhibit 35 anymore. So if I can just go to the next exhibit, which would be Exhibit 36, but it -- we can number it as Exhibit 35 now.

(Exhibit 35 was marked for identification.)

BY MS. GONDEIRO:

Q. Okay. So this is a Special Investigations Weekly Summary from May 20 through 2021 -- or May 20 through May 26, 2021.

Can you please scroll down, I think, to

Table 6?

A. I'm just -- I'm reviewing the full report.

Q. Okay.

A. I'll be there in a sec.

MS. GONDEIRO: Okay. You can actually stop here. You can go up, yeah. Thanks.

THE WITNESS: Okay. Thank you. I'm back.

I'm sorry. You said Table 6 or Figure 6?

BY MS. GONDEIRO:

Q. Figure 6.

A. Oh, got it. Thank you.

Q. So this figure is -- represents the number of cases reported by worksites by on-site date and business type.

So I just want to be clear here again. These number of cases do not represent cases that were attributed to these business types but cases where these business types reported cases; is that correct?

A. Yes.

Q. Okay.

A. Either because they're required to or -- or raised concern and felt the need to.

Q. Gotcha.

A. Actually, I would amend that, that I think by May 2021, if an individual, who we reached them on the

phone and they were completing the full case investigation, said, "And by the way, I work at this worksite," that may have been flagged for inclusion here even if their worksite did not mention them.

Q. Starting in May of 2021?

A. I think it was closer to January 2021 when we started that process.

Q. Okay.

A. Could be February.

Q. Okay. But, generally, based upon this figure, would you -- would you say that it represents that retail space was a -- among the business types that reported a lot of COVID-19 cases?

MR. WALL: Object to form.

THE WITNESS: Yes. You know, at this time, everybody was reporting a lot of cases. But yes, I would say, depending on the timing, retail spaces were reporting cases.

BY MS. GONDEIRO:

Q. What does "Other" encompass?

A. I'll say I didn't remember specifically, but based on reviewing the document, I'm seeing here it includes accommodations, agricultural operations, beauty salons and barbershops, distribution warehouse, fire, EMS, or law enforcement, gym or fitness center,

laboratories, entertainment venues, food processing, office space/workspace, place of worship, public transit, local park, rideshare, shelter, shipping, transit, and waste facilities.

Q. That's a lot.

Why did the County decide to lump all of those business types into an "Other" category?

A. I don't recall that specific decision.

Q. Did the "Other" category -- would it have included cases that were reported from protests?

A. My understanding is -- again, based on the document in front of me, is that this was reported by worksites or employers.

So to the extent if there were a protest by some sort of agency that had employees, I -- I imagine it could have been included here, but I don't see that listed in the -- yeah. I don't know what type of agency that would be that would have employees or be considered a workplace that might have reported it here.

Q. Do you recall the protests that occurred during the summer of 2020?

A. Yes.

Q. Okay. Did the County ever conduct any type of contact tracing to determine whether there were any cases that were attributed to protests that were

occurring in the summer of 2020?

MR. WALL: Object to form.

You can answer.

THE WITNESS: Oh.

Yes, with the limitations I described earlier, that our contact tracing work was focused on prevention of future cases.

MS. GONDEIRO: Uh-huh.

THE WITNESS: So, you know, if somebody said, "I'm" -- if we reached a case and they said, "I'm sick and planning to attend a protest," we would explain to them the, you know, dangers of doing so to others they might interact with.

In addition, I've sort of described how we collected general information that gave suggestions as to where somebody may have been exposed, and one of those was asking about whether folks had attended gatherings. I believe one of the answers somebody could select to that question could be "Attended a protest."

So we would have gathered -- you know, especially at the times when we -- when we reached somebody and they were willing to conduct the entire interview with us, we would have asked them that question, and they would have been given that option as a type of gathering they might have attended.

Q. Uh-huh. Is this information -- was this information collected through CalCONNECT?

A. Yes.

Q. Okay. Is this information documented anywhere else?

A. Not that I specifically know of.

Q. Before the summer of 2020, and in anticipation of the protests, did the County implement any specific type of contact tracing specifically designed for the protests -- the upcoming protests?

MR. WALL: Object to form. Assumes facts.

THE WITNESS: Yeah, I -- I would say I don't think the County anticipated the protests happening at all. And, generally, we were constantly trying to create systems that anticipated the information we would need in the future but often having to adapt in realtime.

BY MS. GONDEIRO:

Q. When the County knew that the protests were happening, did they design a specific contact tracing system designed for the protests?

A. No. And I'll add that the contact tracing system, CalCONNECT, was never designed by the County of Santa Clara. But to the effect that we were using that system, we -- we -- and that system added a question --

or added the ability to choose protest as a type of gathering, we would have made our staff aware of that -- or I recall making my staff aware of that, that that was an option for the type of gathering somebody might have attended so that we could gather that information.

Q. Based upon your recollection, were there cases -- COVID-19 cases that were traced to the protests that occurred during the summer of 2020?

A. So my general recollection is we struggled throughout the entire pandemic to trace cases to anything and say, "The most likely" -- if, by that, you mean, "This is the most likely place you got sick."

But with that limitation, no, I don't recall specific cases that were traced to a protest or specific outbreaks or specific events of protest where we knew or learned information that spread had definitely happened.

Q. Okay. Can you estimate how many COVID-19 cases were reported where someone did attend a protest during the summer of 2020?

A. I -- I -- no, I don't have an estimate of how -- what proportion or how many cases that would be.

MS. GONDEIRO: Okay. Can we move on to the next exhibit?

(Exhibit 36 was marked for identification.)

/////

BY MS. GONDEIRO:

Q. This is a COVID-19 graph of case counts from January -- January 27th, 2020, through March 20th of 2021.

Dr. Rudman, does this graph look familiar?

A. Yes. I am just scrolling through the rest of the exhibit just to make sure there's nothing else I need to see.

Thank you.

Sorry. Your question, is it familiar? Yes.

Q. Yes, on the first page here.

Was the County -- did the County anticipate that the COVID-19 surges would ebb and flow as illustrated in this graph?

A. Hmm. I can't speak for sort of the County as an entity. I don't know if I anticipated -- yeah, I don't -- I don't know.

Q. Yeah.

So would you say, based upon this graph, that the County experienced a surge in COVID-19 cases beginning -- in the beginning of November of 2020?

A. Yes.

Q. And did the County experience a rapid decline in COVID-19 cases starting in the -- around the beginning of January of 2021?

A. I think "rapid" is subjective. But certainly, yes, a decline in the daily number of cases starting around January 2021.

Q. So, on the last date here -- I believe it's like March 20th of 2021 -- would you say that the total daily case counts are about the same as what they were at the beginning of October 2020?

A. Yes, with the limitation that that -- our knowledge of cases was always somewhat delayed. So to really comment on -- and I don't remember specifically. So to really comment on end of March 2020, I would kind of want to see the data as we knew of it several weeks or months later. But it appears that way from this graph and that -- yeah. Yes, it appears that way from this graph.

Q. Okay. Is it your recollection that the COVID-19 cases continued to decline throughout March of 2020 -- of 2021 I mean?

MR. WALL: Just object to --

THE WITNESS: Generally --

MR. WALL: Object to form.

But you can answer, Dr. Rudman.

THE WITNESS: Generally, my recollection is, yes, that between March and, I think, June of 2021, we were seeing an overall decline. Whether that -- what

the minor changes were throughout March, I don't remember.

BY MS. GONDEIRO:

Q. Okay. But, generally, cases were declining -- continuing to decline in March of 2021; right?

A. I --

MR. WALL: Object to form.

THE WITNESS: I believe so.

MS. GONDEIRO: Okay. Can we go to the next exhibit?

(Exhibit 37 was marked for identification.)

BY MS. GONDEIRO:

Q. So this exhibit represents the number of COVID-19 hospitalizations from April 1st, 2020, through March 7th of 2021.

Dr. Rudman, do you recognize this graph?

A. Generally, yes, but not what specific presentation this came from.

Q. Okay. But do you recall reviewing these types of graphs throughout the COVID-19 pandemic?

A. Yes.

Q. Okay. Would you say, based upon this graph, that hospitalizations were declining starting in the beginning of January of 2021?

A. Based on this graph, yes.

Q. Okay. Would you consider that decline to be a rapid decline in hospitalizations?

A. Somewhat. And I think, for the individuals hospitalized, not rapid enough --

Q. Yes.

A. -- or the people working in the hospital. But --

Q. How would you describe that decline?

A. Consistent, although, you know, that's with a retrospective lens from, in this case, March 2021.

I do remember sort of -- for example, if you can see the small uptick right around January 20th or just after, those kinds of upticks, at the time they occur, I remember wondering, have we turned around and headed back in the wrong direction or again back around?

Somewhere between 2/3 and 2/17, there's another uptick. But I think, by March, we could look back and say things have been improving with respect to hospitalizations from January.

Q. Okay. But even though there were slight upticks in -- in January and February, generally, the trend was that hospitalizations were declining; is that correct?

A. Yes.

MR. WALL: Objection to form.

THE WITNESS: Although my -- that's my retrospective view of that now. I don't recall exactly sort of how -- how confident I was feeling in that pattern at the time.

BY MS. GONDEIRO:

Q. Okay. Do you recall that hospitalizations continued to decline through March of 2021, similar to the COVID-19 cases that were continuing to decline in March of 2021?

MR. WALL: Object to form.

THE WITNESS: My best memory is that they may have, or, at the very least, we didn't -- I don't remember a specific increase at that time.

BY MS. GONDEIRO:

Q. Uh-huh. Was it common, though, during the COVID-19 pandemic to see COVID-19 hospitalizations decline as COVID-19 cases declined?

A. Generally, yes, with some limitations, most importantly that hospitalization patterns often significantly occurred later than case patterns.

Q. Okay.

MS. GONDEIRO: Okay. I think we can end here, and then we can take a lunch break.

Does that work for everyone?

MR. WALL: Works for us.

MS. GONDEIRO: Okay. We can go off the record.
(Recess taken from 12:31 p.m. to 1:23 p.m.)
(Exhibit 38 was marked for identification.)
MR. WALL: Dr. Rudman, are you ready to go back on the record?
THE WITNESS: Yes. Thank you.
MR. WALL: Ready when you are, Mariah.
MS. GONDEIRO: Okay. We can go on.
THE REPORTER: We're on the record.
BY MS. GONDEIRO:
Q. Dr. Rudman, do you recognize this Quantitative Retrospective Contract -- Contact Tracing Survey?
A. Yes.
Q. Okay.
A. The exhibit in front of me?
Q. Yes.
A. Yes.
Q. Who prepared this survey?
A. I don't remember which individual -- oh, sorry. The -- the report or the survey the report was based on?
Q. Who -- who prepared the survey?
A. I oversaw a team of people who designed the survey, developed the process for collecting the information, and sort of oversaw the team while they

were collecting the study.

Q. Okay. And who was a part of this team?

A. Hard to remember. I know there was somebody named Alexis D'Agostino who -- I'm trying to remember her exact role or title at this time but was sort of helping with all contact tracing-related data issues.

Q. Okay.

A. And her role was specifically to help design the data system that would collect this information.

At the point we went live with this, CalCONNECT did not have the ability to collect this type of information; so we had to build a separate system, and Alexis was the person who helped to do that. But then there would have been a number of team leads and individual team members who actually conducted the calls, and I don't recall exactly who was assigned to do that at that time.

Q. Okay. Does Alexis work for the County Public Health Department?

A. Yes.

Q. What is her job title?

A. Oh, I believe it's senior research and evaluation specialist.

Q. Okay. And does she report to you?

A. Not in her usual role, no.

Q. Do you supervise her in any way?
A. Not at this time.
Q. Okay. Did you supervise her from June of 2020 through December of 2020?
A. At -- at points during that time, I believe she reported directly to me and certainly indirectly to me. She may have reported to other contact tracing project managers who reported to me.
Q. Okay. When was this survey conducted?
A. So based on the document in front of me, we were certainly collecting data from November 16th through December 14th. I think the data collection may have continued for a few weeks after that --
Q. Okay.
A. -- into early January 2021.
Q. Did you conduct similar surveys like this at any other point during the COVID-19 pandemic?
A. Not under my supervision and not that I'm aware of.
Q. Why did the County choose to conduct the survey in November and December of 2020?
A. The purpose of conducting the survey was to try to augment the information that we recognized that we didn't get very well from the contact tracing work of understanding where people were potentially being

exposed.

So the goal of the survey was to try to understand -- was to try to document everywhere somebody went during the period they could have gotten sick and then look at patterns to see if it taught us anything about where people were likely getting sick.

Q. Okay.

A. And the reasoning for that was because we didn't have other information that was a great way to assess that.

Q. Okay. So this survey was designed to help -- to help the County figure out where cases may be attributed to?

A. That was our goal.

Q. That was your goal. Okay.

MS. GONDEIRO: Can you scroll down to -- so, actually, go up a little bit. One more.

BY MS. GONDEIRO:

Q. It says, "Risk level definition. High-risk exposure: close contact plus no mask."

In this survey, did you keep track of the individuals who were or were not wearing a mask?

A. Yes. So I think I alluded to this earlier, that this is the only scenario I remember specifically directing an operation that included collecting

information about masking in certain settings. And, yes, as a part of this study, in addition to collecting what setting somebody was in, we also asked about whether they wore masks in that setting.

Q. Okay. Is that information regarding whether someone wore a mask or not documented somewhere as it relates to this specific survey?

A. We -- we collected it and documented it, I bel- -- so I don't know whether that documentation persists, whether we maintained it after we concluded the study. But at the time that it was being collected, yes, it was documented.

Q. Do you recall whether the individuals who were reporting COVID-19 cases were wearing a mask during the time that this survey was conducted?

A. I'm sorry. I didn't understand the question. Can you --

Q. Yeah.

Do you recall -- in regards to the individuals in the survey who reported a COVID-19 case, do you recall whether more individuals reported that they were not wearing a mask at the same time that they reported a COVID-19 case?

A. I think, if I understand your question, it's whether the -- the people who were cases, the people who

tested positive who we were interviewing for this, whether -- are you asking whether more of them said they did wear a mask versus whether they didn't?

Q. Yes.

A. Okay. I don't know the answer to that. But I will add that a major limitation we grew to understand as we did the study and evaluated it was that we didn't have a comparison group of people who did not get sick, and so we couldn't say whether the people who got sick were more or less likely to wear a mask than people who don't get sick because this study only included people who did get sick.

Q. Okay. Can you scroll down to the "Key findings"?

So it says the most reported sectors were retail and in private/social settings. Then it says -- below that, it says, "Retail had more low-risk reports."

So does that mean that they had more reports of individuals who -- who were wearing a mask at the time that they reported a COVID-19 case?

A. No, that's not what this says.

Q. Okay. So what does that mean, that retail had more low-risk reports?

A. So if you scroll back up a slide to the definition of "low-risk exposure," what I recall and, in

reviewing this, interpret it to mean was that while -- of all of the cumulative -- number of places people went, a -- the most commonly reported sector was retail or private and social.

Q. Uh-huh.

A. But in retail, more or most of them were low-risk exposure, and that definition is that there was no close contact with any others.

Now, at this time --

Q. Okay.

A. Oh, excuse me.

Q. Oh, no. You can -- you can continue. Sorry.

A. Yeah. So the -- the -- that -- the reason we did not assess masking for no close contact was that was deemed the lowest -- even lower risk than having close contact with a mask was having no close contact at all. So what we're saying is, in the retail setting, whether or not somebody wore a mask, they were actually never even within 6 feet of somebody for 15 minutes.

Q. Okay.

A. So we were saying they were -- yeah. So what this says is they were meeting that lowest-risk group.

Q. Okay. In regards to the private/social setting -- social settings, it said they had more high-risk reports.

So that means they had more reports of close contacts plus no masks; is that correct?

A. Correct.

Q. Okay. Can you scroll down to -- yeah, this is...

So when you -- so this graph says, "Most reported sectors were retail and private/social," and then it demonstrates the number of reports by the business -- or by sectors.

I want to be clear again. These -- these numbers, do they represent actual cases that are attributed to these settings?

A. No. They represent people who are a case that we know because we received a positive case report for them, we were able to reach them by phone, and they said, "At some point during the period before I got sick," when we think people get exposed in a way that translates to illness, "I indeed went to one of these settings."

So, for example, somebody might have responded, "Let's see. During the" -- at that point, I think we were evaluating 14 days prior to disease onset as our best understanding of when you can get an exposure that results in an illness -- "I might have gone grocery shopping twice, to the doctor once, dropped my kid off

at school every day, and been to one athletic event."

Q. Uh-huh.

A. And I believe the way these data are displayed, although I don't -- I'm not positive, that would show up as 14 school exposures and, you know, two retail exposures and one sports/athletic exposure.

Q. Okay. But after conducting the survey, were you ultimately able to attribute any reported cases to specific sectors?

A. No. My recollection of after reviewing this survey, this report of the data and another report that came after concluding the survey, was that it did not meaningfully change our understanding based on other science about what kinds of activities were causing people to get sick or putting people at greatest risk of getting sick.

And the reasons for that were that we -- again, somebody -- it was -- we couldn't differentiate between multiple exposures that somebody had, which one of them caused them to get sick. And the patterns of how frequently people attended different types of exposure -- or different sectors and locations before they got sick seemed to be much more related to what activities were open at the time and what kinds of typical day-to-day patterns people tend to have --

Q. Uh-huh.
A. -- more than what kinds of patterns cause illness.
Q. Uh-huh. Okay.
Okay. I think we can move on from this exhibit.
When did the County first start testing individuals for COVID-19?
A. So the County operates a public health lab --
Q. Okay.
A. -- that was able to start performing their own tests for COVID-19, I believe, in February 2020. Prior to that, the County had a role in facilitating individuals' access to testing by the CDC I think as early as January 2020.
Q. Starting in February of 2020, what type of test did the County -- or what type of COVID-19 test did the County administer?
A. In February 2020, that would have been a PCR, or polymerase chain reaction, test.
Q. Okay. And did the County administer these types of tests throughout the entire COVID-19 pandemic?
A. To various extents, yes.
Q. Okay. Was there any other type of test that the County administered during the COVID-19 pandemic?

A. So, to my knowledge, the County had several roles in administering tests: as a health-care provider in collecting tests; as a laboratory, both a clinical laboratory and the public health lab, two labs operated by the County perform tests; and then facilitating testing by other agencies.

In all of those capacities, the County used both the PCR-based test as well as later on, once they became available, an antigen-based test.

Q. At any point during the COVID-19 pandemic, did the -- did the County ever report cases from at-home tests?

A. Report cases from at-home tests?

Can you specify report to whom or report --

Q. Yeah.

A. -- via what mechanism?

Q. Did they document at-home tests as confirmed COVID-19 cases?

A. So they -- they may have, but that's -- yeah.

Q. You're not sure?

A. No. It's just that it's more complicated.

So there are two kinds of at-home tests -- or two ways in which folks refer to at-home tests. The antigen test may be performed at home. There are also PCR or similar tests that look like gen- -- look for

genetic material of the virus that can be collected at home but sent to a laboratory.

Q. Uh-huh.

A. The latter, collected at home but sent to a laboratory, the County would almost definitely and certainly had systems set up to receive those reports. So I would not say the County was reporting them; the County was receiving those reports and documenting them and responding to them.

For the former, when somebody performs an antigen test at home, it would have varied based on in what setting that might have translated to a report that came to the County. Most notably, it may have been some of the requirements for employers to report to the County when employees tested positive that -- or schools reporting to the County that included when school -- students or faculty tested positive, that may have included home-based antigen tests in their reports.

Q. So you mentioned earlier that the County had a public health lab where they tested for COVID-19 patients; is that correct?

A. Correct.

Q. Did the County contract with specific companies to help them administer the COVID-19 tests?

A. Yes. Yes.

Q. And who -- and what were those companies?
A. So depending on what you mean by -- actually, can you specify what you mean by administer the test?
Q. I guess conduct the test.
A. Okay. Well, so -- so there were different contracts for collecting the test, systems set up to have somebody come to us or come to a clinical setting, and we swab what was usually their nose, sometimes the back of their throat, sometimes collect saliva. So there were -- there were contracts set up to facilitate that test collection. And then I'm aware of one major contractor who facilitated the laboratory test performance.
Q. And who was that major contractor?
A. A laboratory called "Fulgent."
Q. Fulgent.
Are you aware of the cycle threshold used by Fulgent during the COVID-19 pandemic?
A. I'm aware of what cycle threshold is and that there are cutoffs for specific PCR lab tests. I would have to verify exactly which one Fulgent used.
Q. Okay. Do you have an idea?
A. My understanding is most labs were somewhere between 32 and 42 and often were a cutoff at 40, but I don't know for sure that Fulgent was using -- which test

they used and whether it was the same 40 cutoff.

Q. Okay. Were you ever involved in deciding what cycle threshold Fulgent should use when testing for COVID-19?

A. No. My understanding, that's an FDA determination.

Q. Okay. Has Santa Clara County ever received money from outside sources to implement their PCR testing?

A. Can you specify --

MR. WALL: Object to form.

But you can answer.

THE WITNESS: Sorry.

Can you specify PCR testing for COVID or in general?

BY MS. GONDEIRO:

Q. Specifically as it relates to COVID-19.

So let me ask the question again.

A. Okay.

Q. Throughout the COVID-19 pandemic, has Santa Clara County received money from outside sources to implement its COVID-19 PCR testing?

MR. WALL: Object to form.

THE WITNESS: Yes, I'm aware of at least one source of outside funding that, in part, supports PCR

testing for COVID.

BY MS. GONDEIRO:

Q. And who is that source?

A. That would be the federal government grant that I believe is administered by the CDC called "ELC" -- what does that stand for? I think it's Epidemiology and Laboratory Capacity grant -- that we receive via the State Public Health Department that has been used throughout the pandemic to support an array of public health response activities including laboratory testing.

Q. Okay. Were there any other outside sources that you're aware of?

A. I'm aware that, at times, some of the testing performed was reimbursable by third-party health insurance, whether that's Medi-Cal or Medicare or private health insurance. So that would be, I guess, an additional source of funding that supported the testing structure.

Q. Okay. Any other sources?

A. I can't think of any specifically, but it would be typical for other federal or state grant funds to be allowable for that purpose.

Q. Okay. What were -- what were the requirements to receive these types of grants?

A. Those would vary dramatically grant to grant.

Q. Okay. Well, the federal grant by the CDC, what were the requirements in order to get the grant?

MR. WALL: Object to form.

THE WITNESS: Can you specify what you mean by to get the grant? Is it to be a recipient or to claim it?

BY MS. GONDEIRO:

Q. To be a recipient of the grant, what were the requirements that one -- that the County had to fill in order to receive, you know, the federal grant from the -- by the CDC?

MR. WALL: Object to form.

THE WITNESS: So if you're referring specifically to the ELC federal grant I mentioned, which actually has multiple components, but my understanding is -- I think all governmental, state, and local agencies may have been eligible for some proportion of the funding, but how that's determined, I don't know.

BY MS. GONDEIRO:

Q. Okay. Are you aware at any point in the -- during the COVID-19 pandemic that Fulgent may have changed the cycle threshold?

A. I wouldn't have been -- that wouldn't have been part -- no, I'm not aware, and that wouldn't have been part of my role to be aware.

Q. Okay. Are you aware of the current cycle threshold that is used for vaccinated patients in Santa Clara County?

MR. WALL: Object to form.

THE WITNESS: While it may vary by test to test as the tests are approved by FDA, I -- I don't know exactly what's being used in different settings by different labs for different tests. To my knowledge, there are not different thresholds for vaccinated and unvaccinated patients.

BY MS. GONDEIRO:

Q. Did -- I don't want to misstate your testimony, but earlier did you say that Fulgent was following the cycle thresholds that was advised by the CDC?

A. This is not my specific area of expertise, but I believe it's the FDA --

Q. Okay.

A. -- who approves tests -- approves laboratory tests and the details. I know there's also a -- CLIA, C-L-I-A, is another -- I don't know if its an entity or a set of regulations under which lab tests are approved.

What is within my purview is that we intend to work with laboratories or evaluate tests based on their FDA approval. So -- or CLIA approval. So we would set up systems to receive results from FDA-approved or

authorized tests where we would not act in the same way for a test that was not FDA-approved or authorized.

Q. Okay. Are you aware if Fulgent ever followed any cycle threshold calibration that was set by the World Health Organization?

MR. WALL: Object to form.

THE WITNESS: I -- I don't know. I don't know whether -- or how the systems work between what the World Health Organization sets versus the FDA for a given test. And it's also sort of not within my purview to know that level of detail of how Fulgent is choosing their CT, their cycle threshold.

BY MS. GONDEIRO:

Q. Okay. What is -- during the COVID-19 pandemic, what is the most effective COVID-19 test that was used?

MR. WALL: Object to form.

THE WITNESS: Can you specify what you mean by "effective"?

BY MS. GONDEIRO:

Q. I guess "accurate" would be a better word.

MR. WALL: Again, object to form.

BY MS. GONDEIRO:

Q. What COVID-19 test is the most accurate?

MR. WALL: Object to form.

You can answer, Dr. Rudman.

THE WITNESS: Thank you.

So I would say it depends. Accurate to what? PCR testing is considered sort of the gold standard in COVID diagnostic testing because it is the most sensitive. So -- and because it is designed to detect a current or very recent infection, by comparison, antigen testing has a lower threshold for picking up virus and so therefore is considered, in some ways, less accurate. Because somebody with a mild or brand-new or very early or very late infection may test positive by PCR but not by antigen.

On the other hand, you could interpret that the antigen test is more accurate if what you're trying to say is how contagious is a person at a given time.

Finally, there's a third type of test called "a serology" which looks for a human response to an infection, current or past. That test is not helpful for understanding, necessarily, is someone sick right now, but it may be the most accurate for telling us have they ever been sick with COVID.

BY MS. GONDEIRO:

Q. Okay. Was it ever a policy in the County that only COVID-19 tests that were produced by -- or through a PCR testing, that those tests be documented and only those types of tests?

A. No. It was never a policy that only PCR tests would be documented; however, the -- a federal group called "the CSTE" -- I think it's Council of State and Territorial Epidemiologists -- is considered the expert group that defines what an illness is for surveillance and public health purposes, and they have determined, and we have followed that determination, that a confirmed case is somebody with a positive PCR test whereas a probable case, sort of a lower threshold, is somebody with a positive antigen test.

So I would say that the County policy would be to follow that definition as put forth by CSTE --

Q. Okay.

A. -- that differentiates between those two test types.

Q. Okay. But during the COVID-19 pandemic, the County was documenting COVID-19 cases from antigen tests; correct?

A. Yes, but the systems for doing so were different than for PCR tests.

Q. Can you explain?

A. Sure. Because all PCR tests, really, are conducted by a laboratory, and laboratories are required to electronically submit positive and now -- and negative COVID test results into the County -- into

CalREDIE, which the County then receives and acts on, we felt confident, to the best of our ability, that we were receiving the vast majority of all reports of positive PCR tests.

For antigen tests, which may be performed in an individual's private home or in a laboratory setting or in a clinical setting or sometimes in a peri-clinical setting or other -- other -- we were performing them at schools or at other drive-through clinics, the systems set up to receive that information varied throughout the pandemic and were less consistent overall than for PCR.

I would say that for the vast majority of tests conducted at home, we usually don't ever receive that information. For the vast majority of tests conducted in a laboratory, we do receive that information. And then these sort of either -- like, in a clinic or in a specific test site set up for antigen testing, it may -- it varied throughout the pandemic and continues to vary whether we get that information.

Q. Okay. During the COVID-19 pandemic, was there ever a point where you were keeping track of false positive COVID-19 tests?

MR. WALL: Object to form.

THE WITNESS: I'll first add that identifying that a test is a false positive is complex -- is

somewhat subjective and had an evolving definition and understanding throughout the pandemic.

I would say no, there was not a system that was set up for the purpose of documenting false positives, but in the systems in which we received results, acted on them either for contact tracing or other purposes, if we were to become aware that the best evidence was that it was a false positive, we might document in those same systems that our new understanding was that this was a false positive for the purpose of acting on it, whether that's contacting the patient and giving them new information or any other adjustment to our understanding of how we were previously acting on the case.

MS. GONDEIRO: Okay. I think we're -- we can stop here. I actually only have maybe like 15 more minutes left, but I haven't had lunch yet. So we can take a ten-minute break, we'll come back, and we'll finish.

MR. WALL: Sounds great. Thanks, Mariah.

MS. GONDEIRO: Okay. Bye.

(Recess taken from 1:56 p.m. to 2:06 p.m.)

MS. GONDEIRO: Okay.

THE REPORTER: Back on the record?

MS. GONDEIRO: Yes.

(Exhibit 39 was marked for identification.)

MS. GONDEIRO: So this is Exhibit 39. It is Defendant Sara Cody's Response to Plaintiff Mike McClure's Interrogatories (Set One).

MR. WALL: I think this is Exhibit 40, Ms. Gondeiro.

MS. GONDEIRO: Is it Exhibit 40, or is it Exhibit 39?

EXHIBIT TECHNICIAN: Exhibit 39.

THE REPORTER: Counsel, we're --

MR. WALL: Oh, we skipped one. That's right.

THE REPORTER: Yes.

MR. WALL: Okay. So it's Exhibit 39. Thank you. My mistake. I stand corrected.

BY MS. GONDEIRO:

Q. Dr. Rudman, do you recall reviewing these interrogatories?

A. I'm flipping through now.

Yeah, I definitely recall that the document existed and I was aware of that and that there are portions I've reviewed.

Q. Okay. Was this one of the documents that you reviewed before this deposition?

A. Yes.

MS. GONDEIRO: Okay. Can you please scroll down? Keep going.

EXHIBIT TECHNICIAN: Okay.

MS. GONDEIRO: Keep going.

EXHIBIT TECHNICIAN: Okay. Tell me when to stop. Oh, here we go.

MS. GONDEIRO: Keep going. Sorry. I should have --

EXHIBIT TECHNICIAN: Okay.

MS. GONDEIRO: Keep going.

EXHIBIT TECHNICIAN: All right.

MS. GONDEIRO: Keep going. Just keep scrolling, and I'll tell you when to stop.

EXHIBIT TECHNICIAN: Okay. Hopefully, I'm not ruining your eyes by doing this.

MS. GONDEIRO: Okay. Oh, go up.

Oh, Interrogatory Number 18.

EXHIBIT TECHNICIAN: Okay.

MS. GONDEIRO: Okay.

EXHIBIT TECHNICIAN: Let me get it -- there.

BY MS. GONDEIRO:

Q. Interrogatory Number 18 asks, "Identify all COVID-19 cases traced to Calvary Chapel San Jose."

The County responded with -- or Dr. Cody responded with, "The County has conducted more in-depth outbreak investigations that have provided information about the potential sources of COVID-19 cases in the

County. Additionally, Calvary Chapel San Jose staff members have admitted under oath that there have been suspected and confirmed COVID-19 cases among Calvary staff and congregants."

Do you recall reviewing this specific interrogatory?

A. Yes.

Q. Okay. What did the County mean by -- when it said that "The County has conducted more in-depth outbreak investigations"?

A. The data that we reviewed earlier in the special investigations report sort of rolled up or combined together more detailed investigations into certain apparent clusters. At times, those clusters, through focused investigations or other circumstances of the cluster, made it clear or made it very likely that certain cases were attributed to transmission in those settings.

One of the clearest examples of these was when we had a resident of a long-term care facility like a nursing home who had not left the nursing home during the entire period when they could have been exposed and gotten sick. It would become quite clear that the source of their infection was in their nursing home.

Q. Uh-huh.

A. And so those types of in-depth outbreak investigations, while, again, were focused on preventing future spread and stopping any spread happening in those settings, were some of the few investigations where we were able to really have information about where the source of COVID was for that case.

Q. In regards to Calvary Chapel San Jose, was the County able to attribute any COVID-19 cases to the church?

MR. WALL: Object to form.

THE WITNESS: Can I first ask to clarify if the school is independent from the church.

BY MS. GONDEIRO:

Q. Calvary Christian Academy is a -- is a branch of Calvary Chapel San Jose, but they are operated separately. So I'm -- right now, I'm just talking about the church.

A. Okay. So indi- --

MR. WALL: Object. Object to form and misstates the discovery record.

But you can answer the question as posed by Ms. Gondeiro, Dr. Rudman.

THE WITNESS: So, if I understand, your question is, am I aware of cases traced to the church exclusive of the school?

BY MS. GONDEIRO:

Q. Are you aware of confirmed COVID-19 cases that were attributed to Calvary Chapel San Jose, the church, not --

MR. WALL: Object to form. Oh, sorry.

BY MS. GONDEIRO:

Q. -- not the school?

MR. WALL: Object to form.

THE WITNESS: So with the limitation I described earlier, that for the vast majority of cases, we did not ever find a way to attribute them to any specific setting, no, I'm not aware of any cases that we specifically attributed to having gotten sick in the church or that was clearly where they got their infection.

MS. GONDEIRO: You can scroll down to Interrogatory Number 19.

BY MS. GONDEIRO:

Q. Interrogatory Number 19 reads, "Identify all COVID-19 cases traced to Southridge Baptist Church of San Jose."

Do you recall reviewing this specific interrogatory?

A. Yes.

Q. Okay. Did you help prepare a response to this

interrogatory?

A. Yes.

Q. Okay. Are you aware of any confirmed COVID-19 cases that were attributed to Southridge Baptist Church of San Jose?

A. No, I'm not.

MR. WALL: Object to form. Oh.

THE WITNESS: Sorry. Sorry.

No, I'm not.

MS. GONDEIRO: Okay. I don't think I have any more questions.

MR. WALL: If we could just take a short break, Ms. Gondeiro. We'll come back. I may or may not have some questions, but if we could take a short break.

MS. GONDEIRO: Okay. That's fine.

MR. WALL: Thanks.

(Recess taken from 2:14 p.m. to 2:17 p.m.)

MR. WALL: Okay. Are we back on the record, Ms. Knowles?

THE REPORTER: Yes, we're back on the record.

MR. WALL: Thank you.

EXAMINATION

BY MR. WALL:

Q. Dr. Rudman, thank you for your time today. Just a couple quick follow-up questions.

Is there any way to -- let me ask -- scratch that.

Is it possible to determine the source of a particular COVID-19 infection?

A. So sometimes, and it's actually quite rare, either because -- we can attribute a specific infection or a specific transmission event. The two circumstances where that's usually possible are either because somebody really only had one possible exposure. They were a young child who never left the home during the entire period of exposure and therefore must have acquired at home or a long-term care facility resident who never left the facility and must have acquired in the facility.

The other circumstance is sometimes genetic sequencing information from the virus itself that is -- that caused the illness in an individual can be matched to or very closely matched to genetic sequencing of a virus from another individual who is sick who came in contact with that first case. And that is also sometimes enough evidence to say it is very likely this individual got sick from the other who has matching genetic fingerprint of their virus.

In the absence of either of those circumstances, it's almost impossible to know where

somebody got sick, and the best we can do is look at patterns of where they were likely to have gotten sick.

Q. Are you aware of any reported positive COVID-19 cases where someone reported or it was known that they had attended either Calvary Chapel or its school?

A. Yes. I'm aware of cases where it was reported that they attended the school.

Q. And was there any -- did the County conduct any genomic sequencing or analysis of the virus that those individuals had to determine the potential source or sources of the infection?

A. Not to my knowledge, no.

MR. WALL: Thank you, Dr. Rudman. Those are all -- that's all I have.

THE WITNESS: Okay.

MS. GONDEIRO: I don't have any follow-up questions.

MR. WALL: Thank you.

THE REPORTER: Anything further, Counsel?

MR. WALL: Just we would like to request, pursuant to the federal rules, an opportunity to review and make corrections to the transcript.

MR. TYLER: I'm sorry. This is Robert Tyler here. Mariah, I would like to confer with you very briefly because there may be one follow-up question.

Can we go off the record for five minutes? Not even five. Give us two minutes.

MS. GONDEIRO: Okay.

MR. WALL: That's fine.

MR. TYLER: Thank you, Mariah.

(Recess taken from 2:20 p.m. to 2:26 p.m.)

MS. GONDEIRO: I just have a few follow-up questions.

MR. WALL: Sure.

MS. GONDEIRO: Okay.

THE REPORTER: We're back on the record.

FURTHER EXAMINATION

BY MS. GONDEIRO:

Q. Dr. Rudman, was it your testimony that there are two ways that you can determine whether a COVID-19 case is attributed to a specific setting?

MR. WALL: Object to form.

THE WITNESS: I'm not sure if those were my exact words, but those are -- those are the two highest levels of evidence to feel most confident that a case is attributed to a specific setting.

BY MS. GONDEIRO:

Q. Okay. So your testimony was that there are two -- two situations that can show or demonstrate that it is very likely that a business -- or a setting would

have contributed to a specific COVID-19 case; is that correct?

A. Yes. Those are two major settings I can think of right now -- or situations.

Q. Okay. And the first example you gave was genetic sequencing; correct?

MR. WALL: Object to form.

THE WITNESS: That is one of the two examples I gave.

BY MS. GONDEIRO:

Q. Okay. And then the other example you gave was a situation -- or was the other example you gave a situation where someone is basically just enclosed in a specific space and doesn't have, like, a -- like, contact with other people? Is that correct?

A. That's not exactly how I stated it.

Q. Okay. Can you explain the other way that --

A. I think -- yeah, as best I stated it before. Another situation we feel very confident attributing a certain location as the place of exposure is when somebody has only been in that location for the entirety of the period when they could have been exposed, resulting in their illness.

Q. Okay. Did the County conduct genetic sequencing of COVID-19 cases that were reported from

Calvary Christian Academy?

A. I don't know of any genetic sequencing results specific to cases from Calvary Christian Academy.

Q. Did the County determine that the COVID-19 -- that any of the COVID-19 cases that were reported from Calvary Christian Academy may have came from someone who was only in close -- or who was only in contact with people within Calvary Christian Academy?

MR. WALL: Object to form. Outside the scope. Incomplete hypothetical.

You can answer the question, Dr. Rudman.

THE WITNESS: I don't know of any cases associated with Calvary Christian Academy in which that case was only in that location for the entirety of their exposure period.

BY MS. GONDEIRO:

Q. So you mentioned earlier that the County may be able to determine the location of where someone may have gotten COVID-19 if they were on that location and only that location for a period of time.

How long is that period of time?

MR. WALL: Object to form. Incomplete hypothetical.

THE WITNESS: Earlier when I referred to the exposure period or the period during which, prior to an

illness onset, we think their exposure that led to that illness most likely occurred, our knowledge of that has evolved somewhat over the pandemic, but we've usually treated it as a period of up to 14 days.

MS. GONDEIRO: Uh-huh.

THE WITNESS: With more recent variants, we think that that is usually a much shorter period on the number of -- maybe three to seven days.

BY MS. GONDEIRO:

Q. For the COVID-19 --

A. Uh-huh.

Q. -- was the exposure period 14 days?

A. There were periods of the pandemic for which our best understanding of the exposure period for the circulating variants was 14 days; and because of that, for many investigations, we would ask about exposures during the 14 days prior to disease onset.

Q. Okay. During the time when cases were -- that Calvary Christian Academy reported COVID-19 cases, was the exposure period then, which was in January of 2021, 14 days?

A. To the best of my -- oh.

MR. WALL: Object to form.

You can answer the question.

THE WITNESS: To the best of my memory, we were

using a definition of the exposure period for investigation purposes of 14 days at that time, January 2021.

BY MS. GONDEIRO:

Q. Okay. So you have no way to know that persons infected -- that there was anyone infected at Calvary Christian Academy?

MR. WALL: Object to form.

THE WITNESS: No, I would disagree with that statement.

BY MS. GONDEIRO:

Q. Do you have any evidence that there were COVID-19 cases reported from Calvary Chapel -- or Calvary Christian Academy that were attributed to Calvary Christian Academy?

MR. WALL: Object to form. Asked and answered.

THE WITNESS: So, yes, I do have evidence in that we had data that I believe came from both Calvary Christian Academy and individual either cases or their family members sharing that those cases had potential exposures at Calvary Christian Academy during their exposure period or were contagious and were present at Calvary Christian Academy during their infectious period such that they might have exposed other people as well as a cluster, a number of cases occurring around the

same time, in the same location, and who would have come in contact with each other, which both I and the County as well as CDPH and CDC, throughout that period, would consider enough of a -- enough cases in the same place at the same time to suggest some level of evidence that there was transmission happening.

So while I don't feel I can say I have proven that a given case must have come from Calvary Christian Academy, I do feel the County had evidence that there was transmission or likely transmission happening in that setting enough to investigate further and enough to attempt -- as we did with other such clusters, without proving transmission, where we would reach out to try to offer guidance to reduce the likelihood of further transmission in that setting.

BY MS. GONDEIRO:

Q. Are you aware of whether the individuals who reported COVID-19 cases from Calvary Christian Academy were in contact with others in the public outside of Calvary Christian Academy?

MR. WALL: Object to form. Outside the scope.

But you can answer the question, Dr. Rudman.

THE WITNESS: Sure.

I -- I don't know the individual details of the case interviews of the families of the cases we are

aware of who tested positive and disclosed to us or the academy disclosed to us that those students or staff were affiliated with the academy. So I don't know well enough to know what other exposures they had around the same time or potential exposures or interactions they had around the same time.

BY MS. GONDEIRO:

Q. Is it possible that the individuals who reported COVID-19 cases from Calvary Christian Academy could have acquired the COVID-19 from clusters in other community settings?

MR. WALL: Object to form. Outside the scope. Speculative. Incomplete hypothetical.

But you can answer the question, Dr. Rudman.

THE WITNESS: Okay.

Is it possible? Yes, and I think that's the difficulty of some of what we've discussed today with respect to contact tracing. Knowing exactly where somebody got sick was very difficult, and so it was often based on other information that we set our guidance and recommendation about how to reduce spread.

BY MS. GONDEIRO:

Q. Are you aware if the individuals who reported COVID-19 cases from Calvary Christian Academy -- are you aware if they were in contact with anyone who went to

church at Calvary Chapel San Jose?

MR. WALL: Object. Object to scope -- object to form. Outside the scope.

You can answer, Dr. Rudman.

THE WITNESS: I -- I don't recall and don't know if I ever would have reviewed the specific interview data closely enough to know what other interactions they had, including interactions with members of the chapel.

BY MS. GONDEIRO:

Q. Are you aware if any of the individuals who contracted COVID -- or who reported COVID-19 cases from Calvary Chapel -- or Calvary Christian Academy -- are you aware if those individuals were in contact with -- with any employee from Calvary Chapel San Jose during their exposure period?

MR. WALL: Same objections.

THE WITNESS: Again, I don't recall and don't know if I ever would have reviewed the specific interview data to this detail to have knowledge of who else they came in contact with --

MS. GONDEIRO: Okay.

THE WITNESS: -- including whether members of the chapel.

/////

BY MS. GONDEIRO:

Q. So these interviews -- you had -- you documented these interviews of reported cases from Calvary Chapel -- from Calvary Christian Academy; is that correct?

A. No. I would say I supervised a team of a hundred leads who supervised a total of about 900 contact tracers who conducted on the order of sometimes up to a thousand interviews a day all combined into the CalCONNECT database. And so whether I -- yeah. So, no, I did not conduct those interviews or collect those data, but I supervised the system of data collection and staff doing so.

Q. Okay. But someone within the team did document those interviews of reported COVID-19 cases from Calvary Christian Academy; correct?

A. What -- what the system was set up to document, and I presume and believe was documented, was any reports from Calvary Christian Academy of cases within their system, as was required by regulation for them to report anytime they became aware of a case or a cluster.

And then, in addition, anybody who tested positive who we attempted to reach and were successfully able to interview would have been asked, if a child, "Do you attend school, and where?" or, if an adult, "Do you

work, and where?" And if that question was answered and answered fully by the patient or their family and they disclosed Calvary Christian Chapel or Calvary -- I'm sorry -- Calvary Christian Academy, that would have been documented in that CalCONNECT system.

Was that your question?

Q. Yeah. That's helpful.

A. Okay.

MS. GONDEIRO: Okay. I think I'm done.

MR. WALL: No further questions.

And just to reiterate the request for an opportunity to review and correct the transcript, Ms. Knowles.

THE REPORTER: Thank you.

And same transcript order?

MR. WALL: Same transcript order for the Defendants.

THE REPORTER: Anything further?

MS. GONDEIRO: No. We're good.

THE REPORTER: Okay. Then the deposition is concluded.

(The deposition proceedings were concluded at 2:39 P.M.

Declaration under Penalty of Perjury on the following page hereof.)

DECLARATION OF WITNESS UNDER PENALTY OF PERJURY

I, SARAH RUDMAN, M.D., hereby declare I am the deponent in the within matter; that I have read the foregoing transcript and made any corrections, additions, or changes, if any, on the errata sheet. The testimony is now a full, true, and correct transcript of my testimony.

I declare under the penalties of perjury of the State of California that the foregoing is true and correct.

Executed this _____ day of _____ 20____, at _____, _____.
(City) (State)

_____
SARAH RUDMAN, M.D.

STATE OF CALIFORNIA)
) ss.
COUNTY OF SANTA CLARA)

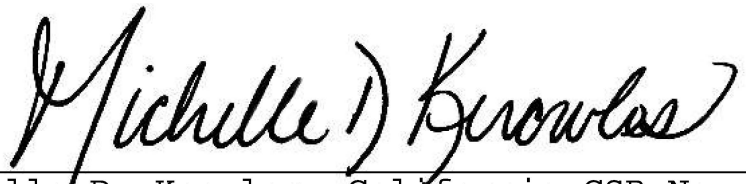
I, MICHELLE D. KNOWLES, CSR No. 8979 and Deposition Officer in the State of California, do hereby certify that prior to being examined, the witness in the foregoing deposition was duly sworn to testify the truth, the whole truth, and nothing but the truth;

That the testimony of the witness and all objections made at the time of the examination were recorded stenographically by me;

That the foregoing transcript is a true record of the testimony given and all objections made at the time of the examination.

Pursuant to Rule 30(e) of the Federal Rules of Civil Procedure, a request was made for review and signature by the witness.

Dated: September 1, 2022



Michelle D. Knowles, California CSR No. 8979