Tamsyn Theo [00:00:42]
Welcome to today's event, our presenters will be joining us shortly before we start, we have a few tips for using this video conferencing platform. You will have the opportunity to ask questions during this event. Please use the Q&A tab on the upper right hand side of your screen to add your questions. We'll answer as many as we can. If your Internet bandwidth isn't strong enough to stream the video, you can use low bandwidth mode. With that setting, you will still hear the audio, but you won't see the video to turn on. Closed captioning click the small c c button in the lower left corner of your web browser screen. If you're having technical difficulties, our support staff can help troubleshoot. Please email events@fredhutch.org or call two zero six six six seven one one one nine. Please note that this event is being recorded. We will share the link after the event. And with that, please enjoy today's event.

Dr. Tom Lynch [00:01:41]
Hello everyone, my name is Tom Lynch, I’m the president and director of the Fred Hutch. We have almost four hundred and fifty people. We expect about six hundred and fifty people on today's call. These are local and national, long-time supporters of the Fred Hutch. And for some of you, you might be connecting with the Fred Hutch for the first time. Forms like this are critical because it allows us to share some of the science that makes Fred Hutch such an extraordinary place to to be able to fight disease and search for cures. So, again, I thank you very much for that. I look forward to spending the next hour together with some really terrific scientists who are going to share with you their perspectives on COVID-19 and how we will one day emerge from this, because I am incredibly confident that we will.

I’d like to start by a couple of announcements for Land and Justice. This is the statement that we make at the beginning of all of our town halls and community engagement sessions. And this is a land, labor, and justice acknowledgment which recognizes the ingrained injustice that has shaped and continues to shape our culture and institutions. We acknowledge that we work and live in the traditional lands of the Duwamish, Tulalip, Muckleshoot and Suquamish tribal nations. We thank the original caretakers of this land who are still here. We support the ongoing struggle for justice against racist, religious, sexist, xenophobic, abelist, trans-antagonistic and all oppressive violence. We recognize with gratitude those who sacrifice, struggle, and labor to make our freedoms possible and challenge us to learn, work, and live justly. And I think the pandemic has really spotlighted how communities of color are disproportionately affected by disease. In a form I was in yesterday with Dr. Larry Corey, as Larry Corey said, probably the single biggest risk factor for dying from COVID is that you have brown skin. And this is something that we are going to have to address. And we are we're going to have some good news today about how we're addressing that and some progress we've made, again, based on Hutch science, which makes it even more exciting that we're able to bring light
to that. But I think that this moment has really caused us to focus more on health equity at the Fred Hutch. And bringing those principles into our science is not only because they're morally right, but because they're scientifically right, is what's driving a lot of the way we're thinking about COVID and cancer, for that matter. And we're grateful that supporters, partners, and patients, who benefit from our research understand how important the effort is.

So where are we today? We're about to enter the holidays. This time of year is by far my favorite time of year. It's a time when my family has always gotten together. We've always been the big conveners, and we love bringing everyone together for Thanksgiving. And, you know, there's other holidays that are coming closely behind. And this is a time when we look forward to connecting with family and friends. And in this year, it's going to be different. Any way you look at it, it's going to be different. And we want to talk a little bit about that today in terms of how to stay healthy, safe, and importantly, sane during this holiday season, because don't underestimate the stress that this holiday season is placing on you and your loved ones as you as you navigate this world that none of us really were expecting or knew how to or were trained in how to handle.

So a couple of things about the Hutch. The Hutch really is synonymous with fearless science. We've always worked at the leading edge of science, pushing boundaries whenever possible. Don Thomas, when he came up with the paradigms of bone marrow transplant and invented bone marrow transplant here at the Fred Hutch, he did something that everyone thought was insane at the time. And yet it's led to to hundreds of thousands of children and adults being cured of leukemia and lymphoma and other diseases. And I think that that same spirit of investigation and that same spirit of fearlessness pervades what we're doing in COVID and in cancer. And give me two good examples of that.

One is opening the Steam Plant. We've opened the Steam Plant this year, which brings together cancer scientists, who are working on understanding the immune system, both by looking at big data and also by doing experimental systems to try to understand how to make the immune system fight cancer better. And we’re not just talking about fighting lymphomas and leukemias now we’re broadening this to be able to fight lung cancer and ovarian cancer and pancreas cancer as well. So the Steam Plant is a remarkable accomplishment, something that the fact that we’re able to do in the middle of a pandemic, we are very, very proud of.

Second is the COVID-19 Clinical Research Center. One of the things we recognized early on was that there are two things that are needed in this pandemic. We need to begin to prevent infections through community measures and vaccines. But then for the people who do get COVID and there will probably still be people, who get COVID even with prevention measures, we need to have better treatment approaches. And the COVID-19 Clinical Research Center provides a forum for studying new treatments. And it's a clinical research area. It's not for routine care. It's for people on clinical trials. So, for example, the drug Remdesivir from Gilead, they got a lot of attention early on, was studied in people who are hospitalized, and it showed that it reduced the time of hospitalization from 14 days to 11 days. Well, wouldn't you really want to know what would happen if you took the drug the way President Trump took the drug, for example, on the second day of illness? And so to do that, you really need the outpatient facility. And the COVID-19 Clinical Research Center is a terrific example of that.
So today we're going to talk about where we are with the pandemic. Just open up the newspaper, listen to your favorite cable news channel. And you know that we're dealing with massive increase in cases, increase in deaths, increase in hospitalizations. And depending on where you are in the country, it is quite regional in terms of of what the impact is like in those areas. We've also had some good news about vaccines and treatments, so we are going to talk about that today as well. So many of us are making a lot of a lot of choices this year that we wouldn't normally make staying home, wearing masks, keeping our distance from other people. As somebody who came, I came to the Hutch on January 3rd. I started on February 3rd was my first day, January 3rd I came to Seattle. And I had one month with my team. And I'm someone who very much thrives off interpersonal interactions. I like to take my team out to lunch and go to dinner and meet the spouses of the team members and find out what their lives are like outside of work. And as everyone knows, we've really been interacting pretty much by Zoom, except for our lab workers. The people doing experiments have done experiments in the lab on staggered schedules so they could maintain isolation at that point. And so because of these choices we're making to stay socially separate and to wear masks, you know, a lot of people think that this is impacting our mental health as well. We're going to have some experts talk about that to us today, and that's really why we're here today. But I think we're all looking at the holidays differently. In my family, we've chosen just my wife and I are going to have Thanksgiving here in Seattle alone without the family. We had planned to gather the whole family. That's not going to happen this year, because we know that it's not something we can do safely, and it's not just our safety, it's the safety of our community. And that's really incredibly important. It's not just one person. It's the only way we're going to gather control over COVID is as a community working together to be able to reduce the spread. And that's why it's so, so important.

So there's a question line, the Q&A line on the side. I really would encourage you to please enter your questions in the Q&A line, it's a great way to be able to ask questions to a large group. And I'd like to begin our discussion by introducing Dr. Steve Pergam. Steve is an epidemiologist and he's the medical director of infection control at the Seattle Cancer Care Alliance. He plays a critical role in keeping patients, caregivers, and our community safe. He's led a proactive response to the pandemic that has become a model for other cancer centers and for other hospitals. Steve serves on the FDA's vaccine advisory committee. And so he'll be one of the people, who will be brought to Washington. And they mentioned, Steve can tell us what the dates are, but we've been in the press, they said the dates will be December, I think seventh, eighth or ninth, one of those days in early December to be able to look at the vaccines and guide some of the complex decisions about deciding do we have safety, do we have efficacy to justify that? So I think there'll be something Steve probably won't be able to comment on, but we'll certainly respect all the confidentiality that he has to have. So, Steve, I want to start as I always do, and for those of you don't know, Steve, the one thing I would say that characterizes the way he answers questions is, and this is for those of you, who are physicians in the audience, Steve is a doctor's doctor. He's someone, who understands medicine and really speaks from the perspective of a physician, who cares about patients and how they do. And for those of you, who are doctors you know exactly what I mean when I say that. And it's really, I mean this is as a compliment, because it really reflects what Steve brings us as our community and to our patients. So Steve, where are we right now in the pandemic and what are you advising that we can do to stay safe?

Dr. Steve Pergam [00:12:11]
So, Tom, thanks for the nice compliment and thanks to everybody for listening in, because this is one of our goals is education, getting people thinking about COVID, not just in a sort of what you read the news and other locations, but to hear it from scientists. So we appreciate everybody listening in. So clearly, what we're seeing right now in the country is really a massive increase in COVID cases. There are a number of states around the country that are really dealing with high levels in hospitals and large numbers being infected. We're over 11 million cases nationally or over 100,000 cases are developing each day. So this is really in the real deep thick of the outbreak. And I think what's concerning to many of us is that, you know, we had our initial phase where we had cases in Seattle and then around the country really hitting at different areas. But at this point, everybody is hitting it at the same time. So we're seeing big increases not only in Seattle and in Washington state, but throughout the country. And places like South Dakota, Utah, Wisconsin have really had major increases. And we're seeing this in Boston and other locations where they previously had outbreaks. So I think it's really everywhere. And I think people really need to focus on on staying safe, because it is a problem wherever you are.

**Dr. Tom Lynch [00:13:33]**

So, Steve, I'm going to ask you the question now that seems to be on on every talk show that I watch, which is this concept of masking. And tell us a little bit about why masks are important and address some of the controversy on the data from masking, which I think is has confused a lot of people.

**Dr. Steve Pergam [00:13:58]**

Yeah, so I think masking is one of these things that's really hard to understand for a lot of people. Masking has been at least in the initial phases, you know, many of us weren't sure. But I think as data has continued to come together, we continue to believe that masking is a major way to prevent transmission. We know that most of the transmission that happens with COVID-19 is through these small respiratory droplets that can be created when you're talking or singing or spending time together with people in an environment like a household. And so the masking is another way to sort of decrease the number of those particles that can go across from person to person. So if I'm wearing a mask and the person that is wearing a mask across from me, we can really limit the transmission that can happen. These are not perfect. They are not 100 percent effective. And I think that's really important. We have to focus on things like social distancing and staying home when sick. But I think they are really an effective way. They're a barrier like anything else. I mean, we've used them for years to prevent respiratory in hospital settings when patients have known infections. And we've known that they've been effective there. It's just moving it out to the community has been something that's been a real, real shift. So there's lots of controversy. Some people think that masks are something that gets in the way of personal freedoms. My thought is it's a small piece of fabric or a small piece of polypropylene that's put across your face. It seems like a low risk to personal rights compared to the fact that you could be saving somebody's life by not infecting them. And I think what's so important about masks, and why we really focus on this from our side is that the key is that for patients that, who originally are developing COVID, I'm not sure why the screen is flashing there, but when people have originally developed COVID, the problem that happens is that the initial episode that occurs is that you offer asymptomatic at first. So you may have disease, but they may not realize that you can transmit it to others. So that mask provides you that protection. You don't know that you're sick and when you're out in public, you could be infecting people, and you can have actually a high what we call a high viral load or a lot of virus in your system. And so by wearing a mask, even that talking, and what doesn't seem like episode three might transmit, that can provide
some protection. So that asymptomatic phase of the virus, when you can be quite infectious is really critical. And that's why masks can provide a big benefit. So I think we're really supportive of them. You're going to read lots of data that says they don't if they're not effective or, you know, they maybe make it harder to breathe. And none of those are true. Surgeons wear them all the time and do fine. So I think we know that the data is not perfect at doing a large epidemiologic studies to identify what the specific benefit of a mask is hard. But some of our scientists, like Josh Schiffer at the Fred Hutch have done studies looking at modeling data that suggests they provide a huge benefit can be up to 80 percent, decrease the chances that somebody might get COVID in the community. So those are really important data. And I think ones that we really need to focus on, because it is hard to study this data in large and large groups of people.

Dr. Tom Lynch [00:17:22]
And I think that's a really important point for people to realize that they're not perfect. And it's part of what we're doing, I think is a really critical thing. So, Steve, we have a question that just came in since we're talking about masks of N95s versus KN95s that come from China. What do we know about effectives of those two types of masks versus cloth masks that might be easier or less invasive to the breather?

Dr. Steve Pergam [00:17:51]
First of all, anyone's worn a N95 for a long period of time, it's hard. When we say it's harder to breathe, it's definitely a little harder to breathe when you wear a N95 for a long period of time. You've seen pictures of nurses and others, who have deep cuts in their face from wearing them routinely in large COVID units. So we really like to reserve those for places where patients are being treated for COVID specifically. So I'm not sure in the general public wearing a COVID N95 is critical. And what we definitely don't want you to do is to get one of those N95 that has a port or a valve on it where you're blowing air out. That defeats the purpose of protecting the people that you're around. It can protect you, but it won't necessarily protect others. So N95 in general, we like to keep those in medical environments, but cloth masks, a three ply cloth mask can be quite effective for the general public. So that's what I wear. I don't wear a N95 when I'm in the community. I wear a three cloth, my mother-in-law made a bunch for us. And so I wear cloth masks in the community. I like the design elements I can put on them. They're a little nicer to wear and frankly they're comfortable, and they work well. And so a good designed three ply cloth mask is going to be sufficient for what you need in the community, because in general you shouldn't be spending a lot of time interacting with people in this community. Exposure should limit your time. So N95s, I'd say probably don't need to be used in general, and they're very hard to wear for long periods. If you're on a plane and you're really high risk immunosuppressed patient, you can discuss that with your doctor. And then the K95s from China. Those are really difficult to know the answer to. So K95s just for people to know, they're ear looped. They're kind of an N95 like. They don't need to be fit tested and that's what's important. So N95s generally work better when they're fit tested by a professional. That's why we use them in medical care. And if you're just buying one to where it may not work as well, because it's not as well fit to your face and everyone has different facial structures. So K95, the problem is a lot of the Chinese K95s, we don't know the quality. And what we found is some that we've studied have not been of high enough quality to protect people. So I'd be careful getting off market or versions like that in the community. So I'd focus on what's available. I get really good cloth mask and if you have a need to get something more stringent, talk to your doctors about that.
Dr. Tom Lynch [00:20:19]
Steve, I just bought one hundred K95s off the Internet, OK, because I thought they'd be a good choice. OK, great. OK, so we don't all made great decisions. So Steve, we can talk about the two vaccine trials that have come out in the past two weeks, and I respect your privacy on what you cannot say being on the vaccine advisory panel, but what do we know far about these about these trials? And when you look at these, what do you think that you personally, when the vaccine committee looks at the advisory panel looks at this, what do you think they're going to look at? What matters in deciding whether a vaccine works and is safe?

Dr. Steve Pergam [00:21:02]
So I think just like any other trial, you want to look at the efficacy, you want to see how well it protects against acquiring COVID-19 and how well it protects against developing COVID-19 specific complications. And if it can do both of those and that's a great vaccine. The other thing we look at is how well it protects people in general. So is it, you know, is the ability of the vaccine to produce an appropriate immune response high enough that we suggest that we think that the majority of people who get the vaccine are going to be protected. So that's an important piece as well. And then finally, we always look at side effects. So my guess is there's going to be some data on side effects, but maybe not as much, because normally we'd look at clinical trials and look at side effects for an extended period. But I think the early data, this looked very encouraging. I mean, I think most people can go all of this data out there, if people want to look at the results, you can go to both Moderna and Pfizer's website and see a lot of the data. That's all not every piece of data is there, but they have a lot of information that's available. And it looks really interesting. I think some of the exciting things I've seen is this in a ninety-five percent and higher in some of these data. And I think for even people sixty-five and older, the data suggests that it can be ninety-five percent, which is really exciting. And most vaccines, I mean an ideal vaccine gets you ninety-five percent or higher response. And I think most of us imagine that it would be much lower. So this response is really exciting and I think could potentially be a game changer for us. I would caution you, though, that all the things we're talking about masking, staying safe, staying distant, not going out in public are going to be critical for a while, because regardless of what happens with vaccines, it's all about supply and how we get it out to the community. And I don't imagine that there's going to be a vaccine available for the general public until the Spring. And most of those early doses are going to go to super high risk populations and potentially health care workers. So I think we have to continue to to be protective and really, really do all the right things to prevent transmission in our communities.

Dr. Tom Lynch [00:23:03]
But I think, Steve that the fact that we can see the end of the tunnel is really important to me personally. And that's a wonderful segway to Karen Syrjala. And so, Karen, I'd like to ask you to come on, we're going to Steve back with us a little but if Karen could come on. Karen is a clinical psychologist, who works with cancer patients. And because the physical, emotional, and economic effects of cancer can last a lifetime, we conduct research to really look at this and the impact of that work. And she co-director of survivorship program, she has a clinic at the Seattle Cancer Care Alliance and hosted regular community events there. She's also director of the Behavioral Sciences Program, overseeing large scale national studies that aim to identify and reduce our long-term negative effects of cancer treatment. So I guess the question I would have for you, Karen, is that, you know, we've talked about the fact that there is hope at the in the spring. I basically think that we'll probably everyone on this call will probably be vaccinated by July 4th of next year. That's possible. And yet the
trauma of how this is impacting us for the past year, the fact that if it’s July 4th, we’re just about, we’re not even halfway through this whole thing. OK, how do people deal with that? How does Steve deal with changing his holiday plans? How do I deal with that? How do we deal with the lack of contact with our families? It can seem overwhelming.

Dr. Karen Syrjala [00:24:41]
It sure can, Tom and I’m pleased to be here today and somewhat astounded at times about the comparability of experiences we’re seeing and hearing from all of us living with COVID, but also the people have gone through COVID experience and coming out as survivors in terms of those similarity of long term effects that we see with cancer. So I think we have a lot that we can use in the science of cancer survivorship and understand how to cope with COVID. I think that the first thing is what you just said, which is that we now know very clearly that there's a time limit on our process of living with COVID. And that's one of the most important things for managing the mental aspect of anything super stressful and know that it's not going to be forever. And to keep reminding ourselves of that, that we're trying to figure out how to best get through a time limited experience and not a forever experience. And so, but the feelings we have, the frustration, the isolation, the loneliness, the other part of this is tough to recognize that we're all going through this, that there's the majority of people are really stressed in this situation. So you're not the only one who's having a hard time and trying to figure out new ways to deal with this. This isn't a familiar situation for any of us isolated in this life for so long in care.

Dr. Tom Lynch [00:26:14]
And Karen, I'll ask you a question that's come up in the Q&A, in the chat line so far, which is how do you handle a family member or a loved one who doesn’t view masking and social isolation as important? They're still your loved one. They're still your family member, and yet they have a different approach to the pandemic than you do. That I would imagine would be extremely stressful and cause a lot of angst. How do you recommend people handle that? And listen and I know that's not an easy question.

Dr. Karen Syrjala [00:26:53]
Well, it's not if you think the only solution that's OK is that you somehow convince them they will wear a mask. So if your goal is ever to change or control someone else's behavior, you're a little bit in trouble. So you can control what you do. And I think understanding what we control and making that a personal kind of that's our goal. Our priority is to do what we can do and not to try to control what other people do. But it does cause us to think, how exposed do I want to be to that person, when do I want to see them? And so what you control, I think, is the choices you make about when and how you see them. So perhaps you decide you're going to see them outside with more distance between you than just the six feet that we know is the kind of estimate. If they're living in your home, of course, that's a bigger challenge. And when they're out in the world and then coming back to your home, that's a really big challenge. And I think we can talk some more about that, but it's a little bigger issue for people. And if that's the issue, then you have to sit down and talk about what are our priorities here. And I think that's a key thing and remembering that when we're talking priorities, we have to think, what do I control and what's the most important thing here. I'm going to do much better if I do one really important thing for me, then if I try to do 10 different things.

Dr. Tom Lynch [00:28:31]
All right, Karen, thank you. And Karen, you’re going to be back in just five minutes. I’d like to next introduce Dr. Parth Shah. Parth is a double threat at the Hutch. He’s a pharmacist, who’s also a Ph.D. in health behavior, and he studies how to improve health policy and clinical practice to deliver better prevention and care services. Part of his research is involved in improving the way providers talk to patients and parents about vaccines. And again, he did this well before COVID occurred. He’s working with researchers now in the COVID Prevention Network to improve community awareness and engagement with the COVID vaccine trials at the Fred Hutch. And his work has led him to confront and address health care misinformation in general. And I’ve always enjoyed my discussions with Parth. So Parth, we are now in a situation where we’ve had data from Pfizer and from Moderna that show 95 percent efficacy in preventing disease and stunning efficacy in preventing serious disease. And our initial read on the side effect profile appears encouraging, understanding that two months is not enough to know for sure what the side effect profile is. But the short term side effect profile looks good at this point. And yet there’s a tremendous amount of skepticism and misinformation out there about vaccines in general. Now, I tend to be someone, who tries to believe in science and seek information, and my reaction to the Moderna and Pfizer data would be, this is great. This is going to convince all the anti-vaccine folks that vaccines work. Once they just see this data from Moderna and Pfizer, we’re all going to be fine. Is that true?

Dr. Parth Shah [00:30:21]
So I kind of live in that same perennial optimism world also, where when we see really, really exciting data like this, that this could move the needle. And I do think that there is going to be a certain amount of proportion of the population that will see this data efficacy data, which is wonderful, over 90 percent. I mean, this is a home run and in my books, at least for this preliminary data. But there's still going to be a big portion of the population that is skeptical and understandably so. We don't know what the long term effects are for these vaccines. These trials are going to have to still continue for the safety data and safety monitoring. But this portends well for for uptake and acceptance. I think seeing that a vaccine is 90 percent effective will change people’s minds. But there are still significant barriers and hurdles that we need to address. We've mounted one challenge. We are at the end of one tunnel, right. We're seeing the light, but we're actually entering into another another tunnel now, which is implementation dissemination, which I would argue is an even more significant challenge. How do we vaccinate hundreds of millions of people in a few months? It's a huge challenge.

Dr. Tom Lynch [00:31:44]
And I think one of the interesting points, and this has been said many times this week, vaccines don't do anything, vaccination does everything. And so just making the vaccine won't do it. We've got to make sure we've got ways of distributing it and making sure it gets to the people who need it. And I think that's going to be very important. One question, Parth for you would be, OK, so let's say the Moderna and Pfizer data holds, and I think there's every reason to believe the efficacy data will hold. But let's say that the safety data, when it’s reviewed by the FDA, confirms that the side effects are generally tolerable with some mild fever and fatigue and tiredness when you get it. What percentage of people do you think will still be hesitant about taking the vaccine in the United States?

Dr. Parth Shah [00:32:33]
So that's really hard to project if I'm basing it off of the current survey and poll data right now, it's ranging anywhere between 40 percent to around 60 to 70 percent of the population. Now, that range
is fairly broad because it's based off of who's being asked these questions, where are the samples coming from. But I think as more data comes out, as more efficacy data comes out and the safety profile is confirmed and established, I think we will see an uptick, a slow uptick of of acceptance and a slow uptick of of getting vaccinated. But it's really, really hard to tell how what percentage of the population is going to get vaccinated. I think modeling data has showed for herd immunity. We need about 70 percent of the general population vaccinated for COVID-19. I don't know if that's actually true. It may be higher. It may be lower. It kind of depends on a variety of different social factors, which as scientists and as policymakers, we don't have a lot of control over individual...

Dr. Tom Lynch [00:33:51]
Parth, thank you. If I could ask Karen and Steve to come back for our panel discussion, that would be terrific. And while they're all coming back, Parth, I'll ask you another question, which is how do you recognize misinformation? You know, I think we all have Twitter accounts. We all have our favorite cable news stations. We all read our favorite newspapers. How do you tell when you're being played and something is not real?

Dr. Parth Shah [00:34:18]
Yeah, good question. It's tricky. And I would say it's getting a little bit harder and harder to be able to, you know, spot misinformation. But there are certain types of practices that we can start doing in order for us to identify this information and become a bit more resilient or less susceptible to misinformation. So one is pay attention to the source of the information. Is it coming from a credible source? Is it coming from a place like the Hutch or UW, CDC? Is Dr. Fauci the one providing that information? Knowing who the source is can get us a long way of identifying whether the information is believable. The other thing is, is the source known for vetting information? If you're getting your news from a particular media outlets, pay attention to maybe a variety of different outlets. Don't just look out one, like The New York Times, maybe go to The Wall Street Journal or the National Review, places that are known for vetting information that they receive. The second thing is look at the content of the information. Is it anecdotal? Is sensational? Is it exaggerated? Those are the types of things I need to pay attention. Don't just look at the headline. And the last thing is recognizing how we as humans process information. We all have biases and we all take mental shortcuts when it comes to processing and deciding whether we like information. And humans have a tendency to seek out and believe information that confirms to our worldviews and confirms to our values, and confirms to our beliefs. What you can do is just take a mental pause and ask yourself, are there credible alternative ways about thinking about this or alternative explanations that I haven't entertained? And taking that beat and moment to just think about, well, are my biases playing into me wanting to believe this, or can I actually believe this information?

Dr. Tom Lynch [00:36:18]
And Parth, I'll give you a great example of that. I'm a huge sports fan, OK? And before I came to Seattle, it is now obviously a big Seahawks fan and love Russell Wilson. But in my prior life, I was an enormous Tom Brady fan, OK? And whenever there was a video or article that said Tom Brady was great, I believed every word in that article. And I think this idea of confirmation bias and how it conforms to your belief structure is something trivial like Tom Brady and the Patriots. It's probably not dangerous, but it can be amazingly dangerous when we think about things like health and public safety. And Karen I'll ask you, it's incredibly fatiguing to question all the sources of data that we get in that inform our world view, would inform how we think about our health. And what Parth said is like...
really important to, you know, to do that and make sure you’re questioning all the sources of information. I mean, I think it’s hard enough for us to catch the the phishing attacks that we get every day into our email accounts and to be vigilant there. How do you mentally stay sharp and not get fatigued and frustrated with having to constantly question where our information’s coming from?

Dr. Karen Syrjala [00:37:37]
We're so inundated now with information, and I think that the most healthy thing we find people doing is setting limits on that volume, you know, turning off that dial, getting up and walking away, whether it’s your computer or your television or the newspaper or whatever it might be. But just getting away from the idea that to be safe, you have to read and know everything out there. If something's really important, it's going to rise to the surface. And if you go take a day off from any television or any of that news, your mental health may be much better. And you we haven’t lost much in the way of information. So I think that's the biggest thing is just sometimes step away from that overload.

Dr. Tom Lynch [00:38:29]
So thank you, thank you, Karen. And so, Steve, this question came in on the on the question line, and it is commenting on a CDC report in somebody named Hood says that The New York Times just reported that the CDC is advising people to not travel and to cancel Thanksgiving plans with family members, who are outside of your household. I'd like to ask you what you think of that, how you're handling your own holiday plans. And Parth and Karen, if you could share what you're going to do for your holiday. And that's a really hard question, Steve.

Dr. Steve Pergam [00:39:07]
Yeah, I mean, I think it's really important. I love Thanksgiving like everyone else. I sort of like over eating, watching football and spending time with family. It’s just a lot of it's a lot of fun. It's a really relaxing time. I'm actually in clinicals, so I won't be able to drive normally. But what we literally have planned is, you know, we're going to be at my house. We're literally eating turkey sandwiches and going to be communicating with family over the Internet. My parents live in Bellevue. They're very close by, but we're not getting together because we feel like it's important. You know, I I think what's key is that you really want to focus on people in your household that you're going to celebrate, celebrate with people in their household. The more people you bring in, the more chance you have to transmit. So I continually remind people that it's like every extra person that you bring in is increasing potential risk that you could bring a COVID case in. And there's really been some really tragic examples of this where weddings or other major events have been brought together with people coming together as a group and leading to large outbreaks within communities and and households and families. And, you know, I constantly remind people that what you want to do is you want to focus on what Thanksgiving is about, is about sharing time with people. It doesn’t have to be in person. It's not quite as effective. That's not quite as fun. Doesn't have that sort of thing, that sort of that sort of warm feeling that we all have. We want to hug our relatives. But I think what's really important is you want them to be here next year and the risk of COVID is real. And we don't want people that we care about to not be here the next time around. So let's talk about it being a really dangerous event and make sure that, you know, you do stay apart. And if you do get together, you know, I really encourage you to eat apart so that you're not coming together in a room and all eating across the table, because you're going to be talking and that's going to increase the risk for transmission. And so you eat in separate rooms. And then when you're together, if you're coming
together into a household that you mask to prevent that potential transmission. Again, I really encourage people not to travel, not to get on, you know, airplanes and go long distances and all get together, because those large group gatherings, an even smaller group, gatherings with a couple of households together we think are risky enough that we’re not recommending it. We’re certainly not recommending in the system. I feel good because I think there's convinced a lot of people not to have Thanksgiving, including Tom Lynch after our conversations. But I do think it's important that we have to be thinking about even small events like that can lead to transmission.

Dr. Tom Lynch [00:41:36]  
And thanks, Parth?

Dr. Parth Shah [00:41:38]  
All right, yeah, so I've been having conversations with my family, I don't have immediate family in the Seattle area, all of my family's in Los Angeles, and the conversations we've been having have just been it's not safe to travel. My parents are very high risk for severe COVID disease, so I don't feel comfortable getting on an airplane and traveling to them during this time. A lot of the ways I think about this is every time I go out into a public space, I'm effectively resetting my exposure clock. Like every time I walk out, that exposure gets reset and then I have to count down to 14 days again. And that's been my behavioral control. Every time I have the inclination to go out. But this holiday time is important for people like myself, who are of South Asian descent, Diwali happened last week. This was a big time for families to get together. And this upcoming holiday season is also a really important time, not just for my family, but for other families. But we're we're making the decision not to get together. And I think I'll reevaluate things in a few weeks after some of those some evaluations on the new mandates that have been put into place. But I think as of right now, it's just going to be Zoome calls with friends and family and care.

Dr. Tom Lynch [00:42:57]  
And Karen, what are you doing?

Dr. Karen Syrjala [00:42:59]  
Well, we usually have a very large family. We usually have Thanksgiving dinner around the table with at least 40 people. That's the minimum number and that's all for this year. It's going from forty to two is quite a shift. And there's no question it's not going to be the same. And it's a loss. So what I try to do is take that big picture, you know, in the years of my life one Thanksgiving that I've missed isn't going to maybe even be remembered. I think COVID will be remembered, but I'm not sure that Thanksgiving will. So we're going to stay home. And my first thought was, well, we'll just have a nice dinner, but won't do the whole turkey. And I was feeling even more lost, and we said, you know what, let's do it. We're going to get a turkey and we're going to make stuffing. Maybe we won't have all the 20 sides of dishes and things, but we're going to have the tradition in that sense. And the other thing, because I was missing the connection and will Zoom, and we're good at Zooming and all, but I know it's not the same. And I thought, what can we do that's a little special or different? And so what we decided is we always bring the crab cocktail appetizer. And so we decided we're going to drive our crab cocktail appetizer and drop it on the stairs of eight of our family members, who live in the area. And it's our way of kind of reaching out to them. So, you know, we're just trying to make a new event out of it that's sort of fresh and different, but still has the acknowledgment that this is an important time to connect.
Dr. Tom Lynch [00:44:40]
Thanks, Karen. And this next one is for Steve and Steve, this is a really, Gail Broder brings this up, it's a really, really good point. And I think it's important to hear this one, which is it's not only a question of vaccine supply. He points out that the vaccines are showing efficacy against COVID-19 disease, against primary infection with sars-cov-2. We're going to need mask, distancing, handwashing to protect against primary infection. And that's something I've been thinking and wondering about. Can you comment on that? Because I think there's a chance Gail might be right there for a while.

Dr. Steve Pergam [00:45:18]
Yeah, I think this is this is the piece that's going to be super important as we start to look at the data. And we sort of when I'm really looking forward to seeing it, more detail and hearing that component of the science. I think it's going to decrease the number of patients, who actually get COVID. I think it's going to be, it might be both. I think that's what they're hoping. We're hoping that it's both a decreased number of people who develop COVID and develop complications. But it is entirely possible that one of its major benefits may be limiting severe disease. And so if that's what it is, I do think that things like masking and social distancing, etc. are going to remain important. And as we've talked about and Parth brought this up I think really importantly, the challenge of getting vaccine out to everyone is going to take a lot of time. It is a massive lift to get vaccine to millions of Americans. And there's a number of populations that have not been studied well. We don't have data in pediatric vaccines as an example yet. We don't have data for cancer patients and highly immunosuppressed populations. So there's going to continue to be gaps in that information. And so it will take a long time before we can get vaccine out to everyone. So I envision there's probably some of these things we're doing now are going to continue. I also think the other thing that's kind of is a little subtle piece that's interesting is we have not seen influenza on the levels that we've seen in prior years with all this social distancing and masking. And so the data in the United States so far has been really impressive in terms of other respiratory viruses. And so if we take some of these tools, we don't have to be as extreme in future years, but this might be really valuable in helping us to prevent other respiratory diseases in a lot of our patients. Influenza, we forget is a really deadly disease that can be quite severe in both the really young and old. So if we can get that under better control, I think that's a potential benefit. So I think we're going to learn a lot from this experience that that may lead to changes in the long term as well.

Dr. Tom Lynch [00:47:19]
So here's an interesting question, Steve. For Thanksgiving, what if everyone's tested negative for COVID and then quarantines for 14 days? Can they have Thanksgiving together?

Dr. Steve Pergam [00:47:31]
Yeah, so I think the perfect scenario is if you can do this. If you can get tested and you can truly assure that everyone's quarantined for 14 days and you get together, that's feasible. I mean, I think that's the perfect scenario where you could get together. It depends how people get to your household. If they're in your city and they're not taking planes or other things like that, then that's possible. I think what's hard is that how do you know that people really are following through? And we've heard these stories of people, who say they're quarantining and then they did go visit a friend and had a drink at a bar or something else. And so I think it's really the key is that you have to trust people, and it's really hard with family, because family are people that you are born to trust. You believe that they're going
to do the right things for you. And what you don't want is you don't want to be set up for something that may not go right. So somebody maybe didn't quarantine as well. They went to the gym or did something else that put them at risk. I think it's important that testing itself is not sufficient, because you may not have symptoms and you may not have detectable virus when you first get tested and two days later you may have the virus. So depending on your exposures and the timing of this, it really isn't just testing. So if you're having all your friends and family tests before they come to see you, it doesn't mean that they don't have it when they're actually visiting you. And that may be even more so if people are staying for longer periods of time and traveling where they might acquire it during that travel period and then develop symptoms while they're there with you during that visit. So I think it's key to understand that testing is not sufficient and it will not provide you 100 percent protection. And that quarantining, while great, if you can really document that it's happening, just be wary that not everybody follows through on those on those recommendations.

Dr. Tom Lynch [00:49:10]
I guess the other question is, this is a question someone asked about the impact of the vaccine, Karen, on our mental state as individuals and as a society, meaning you think that the news of the availability of a vaccine makes people feel better, or do you think we're still so far away from it being reality that it hasn't really improved how people's mood is and how people are feeling?

Dr. Karen Syrjala [00:49:42]
I don't think we have the evidence on that yet if we want to talk scientifically, but from my observation experience, I would say that it's definitely lifting the mood for people, because of that ability to see the light at the end of the tunnel. There may still be as Parth was saying other tunnels ahead or things we don't know. But knowing that we have an end to this, that there really is an answer of some kind, I think is a huge relief for people.

Dr. Tom Lynch [00:50:14]
OK, and Parth this question is for you. So the question is, what about employers mandating vaccines? So the question is, will the Hutch mandate COVID vaccination for workers, who work at the Hutch? I can tell you that that we do mandate influenza vaccine for people, who work at the Hutch and work at the SCCA with patients. There are exceptions for people, who have a contraindication, a medical contraindication, and there is an opt out opportunity for I believe it's for religious exemption or for personal exemption. Whether or not that would be something that would happen. I guess my question to you, Parth is tell me a little bit about what kinds of policies you think that we might be adopting for vaccines? And if you're somebody, who is vaccine skepticism, how do you react to to discussions like that? I would imagine that could be triggering. It could be something that would be tough for people who are vaccine skeptics to to hear.

Dr. Parth Shah [00:51:15]
Yeah, mandates are always tricky. It's not just around COVID, right? I mean, in the space that I work with HPV vaccination, there has been incredible resistance to any form of mandates for a vaccine that prevents against cancer or any other childhood vaccines. And I could imagine that if states or even local employers right, are mandating vaccinations, I mean, depending on the population and group, there may be very high compliance with those mandates. Right. I imagine that the vast majority of people at the Hutch would follow a mandate if a COVID-19 vaccine mandate was put in place. But I think it's employer specific. I don't even know if Washington State has been entertaining the idea of a
mandate. I imagine the majority of people once vaccines are available, and they're going to be available in phases. High risk populations are going to get the vaccine first, then lower risk populations like myself are going to be at the end of the line, which is fine. We want to vaccinate those who are going to develop severe disease first. But those phased approaches and things like that, I don't really know what that's going to look like. School districts may mandate vaccination. That's another thing that parents may have to consider for the upcoming year when kids are going back to school, maybe next fall. So I don't really have a clear answer on the mandate. I'm sorry.

Dr. Tom Lynch [00:52:46]
So, Steve, one of your other jobs is infection control at the hospital health care worker for a slightly different perspective. What's your perspective on that?

Dr. Steve Pergam [00:52:54]
Yeah, this is I agree with Dr Shah, this is a challenging situation. When you mandate things, there's almost this gut reaction for some people to fight against it. And so it's a strange phenomenon that when you mandate things, there tends to be some people that dig in their heels even more and say no. And I think what we've seen is that it depends on what you define as mandated. So what we do with mandated flu vaccine is we say you must either get the flu vaccine or go through a declination process, which is complicated. And so we want to get good education. We want to understand why getting a vaccine might put others at risk. And that really changes the narrative for a lot of people to understand. I think a lot of this isn't really people that are saying they don't want to get vaccinated. It's hesitancy. And if you put them in a situation where you say, I need you to tell me why you don't want to do this. And here's some information. I think the majority of people change their opinion and end up getting the vaccine. So I think if we can focus on the hesitancy group and not focus on, you know, the five percent or the eight percent or 10 percent that just say, I'm never going to get a vaccine no matter what, then we'll get to the levels we need to be. So I think it's all about how messaging is done. And I think what I'd like to see is I'd like to see significant money put into people like Dr. Shah and others who really are going to focus on how can we educate people about why vaccines are so important. We've lost some ground in that area. And I think the news about the COVID vaccine is an opportunity not only to improve our vaccine, to sort of improve our situation of COVID, but also to really show people how important vaccines are to us and to really saving lives. And so I think we should use this as an opportunity to build on what we've done with things like measles and influenza and others. I think it's going to be critical to expand on that.

Dr. Tom Lynch [00:54:46]
I think one theme I want to just pick up on that something I'm trying to really live in my own life and that I've heard from people here today on the panel, from Karen and Parth, and Steve is a couple of ideas. One is that Karen made the comment earlier that you're not going to change someone's mind about wearing a mask or vaccines in one discussion, and that listening to each other and showing generosity to each other is probably going to be an important strategy for how we go forward. And the reason I want to emphasize that is that we're emerging from an election, and we have five hundred and forty-seven attendees on this call. And statistics will say that two hundred and forty-five supported one side and two hundred and fifty-three supported the other side of the people, who are on this call. And I think we really do need to find ways to understand for those two hundred forty-five to understand those two hundred fifty-three and vice versa. And I've had a number of interactions in the past week where I found myself wanting to try to convince someone of something and realizing
that I probably have to do more listening, as do we all. If we're going to get someplace and we're going to get to the point where we don't dig our heels in and view each small question as an existential threat to our livelihoods, our freedom, and our values. And it's something, which is a symptom of our country, which everyone has right now. And I think that we need, the one thing about that I'm hoping with the new president is because he's more of a moderate, is that will he try to reach out and find ways to get us to have a conversation together and to come closer together and try to understand each other? One person pointed out in the chat area how refreshing it was to hear someone talk about, have Parth talk about The Wall Street Journal and the National Review, in addition to The New York Times and NPR. And that's a great comment that somebody made, meaning we need to be open to ideas. We need to talk to each other. We need to try to understand each other as we move forward. So I really believe that that's going to be very, very important, not only in how we deal with the pandemic, but how we deal as a society, because I think what we've learned is our society is more fragile than we thought it might have been going into this pandemic. And when you see the differences between how the pandemics help being dealt with in a state like South Dakota versus how was dealt with in Washington state, we need to find ways to be able to talk with each other and find common ground, because I think that's going to be incredibly important. And I want to thank the panel for a remarkable discussion. Thank you all for participating and thanks to all of you for coming. I think one thing I just want to finish with is just to tell you how important it is for us at the Hutch to be able to take risks in our science, to be able to innovate and to be able to stop COVID as well as cancer. In other words, we need fearless science and fearless science needs you. And your support of the Fred Hutch is incredibly important. As you know, NIH grants cover about 70 percent of research costs. 30 percent of research costs need to be covered by sources outside of research grants, which is essentially philanthropy. So you're giving to the Hutch makes an unbelievable benefit. I hope you will join us for the Fred Hutch Celebrating Fearless Science event, and you'll get the information on that. We look forward to seeing you. It's a fun, free, and inspiring event with special guests, including the Grammy Award winner, Sheryl Crow. To learn more, go to our website and search fearless science. And if you'd like to directly support the science that's needed to end cancer and the pandemic, please go to fredhutch.org Donate Now to make it to make a gift to the Fred Hutch. Every dollar helps our research endeavor tremendously. I wish all of you a peaceful and wonderful holiday season and look forward to touching base at our next Science Says session. Thank you.