Online Event

“Trusting a COVID-19 Vaccine: Where Do We Stand?”

RECORDER DATE:
Wednesday, December 16, 2020

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Hello. Good morning and welcome to this discussion about vaccine confidence and COVID-19 vaccines in the United States. My name is Katherine Bliss and I’m a senior fellow with the CSIS Global Health Policy Center. It’s my pleasure to introduce this public session and work of the CSIS London School of Hygiene and Tropical Medicine high-level panel on vaccine confidence and misinformation.

Now, I think many in the audience are familiar with the work of the CSIS Commission on Strengthening America’s Health Security. In 2018, that Commission convened a bipartisan group of senior experts on global health, national security, and U.S. foreign policy to analyze gaps in U.S. health security and health emergency preparedness, and to identify ways to strengthen international actions and collaborations to improve global health security. Much of the Commission’s work was motivated by the understanding that protecting health overseas is an important element of protecting the health of Americans at home.

One of the areas of keen interest for the Commission was vaccine hesitancy. In particular, the commissioners saw the worldwide increase in cases of vaccine preventable diseases, like measles, decreasing immunization coverage in the United States, and the circulation of misinformation about vaccines on social media and other channels, and worried that the American public was increasingly vulnerable to outbreaks of diseases that many communities has really forgotten about. The Commissioners were particularly interested in the important role that misinformation and disinformation played in shaping public attitudes about immunizations and parents’ decisions whether or not to immunize their children.

In its final report released last November, the Commission noted that finding ways to improve vaccine confidence should be a priority at the federal, state, and local levels. Over the next several months, which overlapped with the outbreak of COVID-19 and urgent work related to the development of vaccines to prevent it, the focus of follow-on efforts related to vaccine hesitancy and misinformation shifted to the domestic challenges within the pandemic context in the United States, and it led to the idea of what has become the CSIS London School of Hygiene and Tropical Medicine High Level Panel on Vaccine Confidence and Misinformation.

In July, the panel co-chairs Steve Morrison, senior vice president of CSIS and director of the Global Health Policy Center, and Heidi Larson, professor of anthropology, risk, and decision science as well as the director of the Vaccine Confidence Project at the London School, convened a bipartisan and international group of experts from public health, cybersecurity, public opinion research, and communications to assess the implications of misinformation and vaccine confidence for U.S. national security within the COVID context.

In October, the panel issued a call to action defining the problems of vaccine confidence and misinformation about vaccines as a national security threat. The call to action outlined five key recommendations. Let me briefly tell you about each one. So the rapid – the first one is the rapid launch of an independent panel on vaccines and misinformation to assess the decline in popular trust in science and recommend concrete measures to be taken at the national, state, and local levels. The second relates to innovative approaches to reaching diverse and
underserved populations with vaccines and other social services support by integrating the delivery of COVID-19 vaccines into a broader platform of assistance, such as other kinds of health care, counseling and referrals for housing, or unemployment benefits.

The third recommendation centered around pledges and actions by mainstream and digital media to proactively stop the spread of mis and disinformation and also to promote collaboration with health providers to amplify scientific content on those platforms. The fourth centered around activism by key social and economic sectors to initiate national dialogue about vaccines and empower people to make informed choices. And the fifth recommendation in the call to action centers around federal reform, including interagency leadership at the National Security Council and increased U.S. support for global immunization partners to address the issues of immunization within the larger context of confidence around health and vaccines.

Now that the call to action is out, we have initiated a series of public events to discuss the recommendations and hear input from other groups. This is the first of those meetings. Our conversation today will really focus on the first recommendations in the call to action. That is, the establishment of an independent review panel to assess the root causes of hesitancy around COVID-19 vaccines in the United States, and to develop recommendations to address it in the diverse communities where this manifested. In January and February, we’ll host additional public meetings on each of the remaining four recommendations, with a final report and public launch in April.

To set the stage for the conversation we’ll hear first from Dr. Mollyann Brodie, executive vice president, chief operating officer, and executive director of public opinion and survey research at the Kaiser Family Foundation, and a co-author of recent polling analysis in the foundation’s new COVID-19 Vaccine Monitor. The monitor’s latest public information – public opinion information was released yesterday, so it’s really hot off the press and couldn’t be timelier, when vaccines are being analyzed, authorized for emergency use, and distributed in many countries around the world, including now this week in the United States. And so at a moment when some media analysis groups are seeing tens of thousands of pieces of misinformation about vaccines circulating every week, the percentage of people willing to get a vaccine has risen but there are considerable variations among demographic groups, as the monitor shows.

So after Mollyann Brodie’s presentation I’ll hand things over to Steve Morrison to introduce our next speakers and moderate a discussion. So, Mollyann Brodie, let me invite you first to share your slides and latest information now.

Mollyann Brodie: Great. Thank you so much, Katherine. And thank you, Steve, and Heidi, and everyone at CSIS for bringing all these key people together to be having these discussions and to launch just the important national conversation that we need to be having at this time. I’m going to share my screen and hopefully you can all now see this. And as Katherine said, we have been tracking public reactions to and experiences with the pandemic, and certainly the subsequent development, and now the distribution of the vaccine. These results are hot off the presses. (Laughs.) And there is good news and there’s also some cause for some pause and for planning for the future.
So first, some of the good news. When it comes to the vaccine development and distribution process, as of now about two-thirds of the public are at least somewhat confident that the vaccine has been properly tested for safety and effectiveness and that it will be distributed in a way that is fair. Now, these are shares that have increased since the recent announcements of the successful vaccine clinical trials and since the culmination of the presidential election. So with that as the good news, we also should have a note of caution that it still means about a third in each case say they’re not so confident about these things.

In terms of the public’s willingness to get vaccinated at the moment, there are certainly lots of organizations who have been asking about people’s intent to get vaccinated. And clearly you can see here that the specific question’s wording and the specific answer categories matter in terms of determining the exact share of the public who we deem as sort of hesitant – ranging from 27 percent in our recent project to 39 percent in the Pew Research Center’s recent project. But on average, we’re all getting about a third of the population is unwilling at the moment.

Importantly though, in virtually all of these cases we’ve seen a decline in the shares who are hesitant, and therefore an increase in the shares who are more willing to get vaccinated. Again, this is most likely the result that we’re no longer talking about a hypothetical vaccine. We’re now talking about actual vaccines that people have heard about, that have actually been tested. So for an example, in our own surveys, the share who say they probably or definitely would not get a vaccine has fallen from 34 percent to 27 percent.

Now, no matter what the actual exact estimate of the size of the hesitant group, all of the surveys are showing the same picture in terms of which of the subgroups within the public are more or less likely to be hesitant. So note here that those who self-identify as Republicans, Black Americans, and those living in rural areas are among those with the highest shares being – reporting being at least somewhat vaccine hesitant. Older adults, those with serious health conditions, and self-identified Democrats are among the groups with the smallest shares likely to be hesitant.

When we go a step further and ask those who are hesitant why they feel this way, at the very top are some reasons that are perhaps easier to address with more information and outreach. Like, they’re worried about possible side effects, or that the vaccine is new and they just want to wait and see how it’s working for other people. Now, other reason that rise to the top suggest a more complicated set of beliefs may be at play. For example, not trusting the government to make sure the vaccine is safe and effective, or addressing concerns that politics has played too much of a role in the vaccine development process.

And as you might imagine, not everyone worries about the same things. For example, know here that a much large share of Black adults who are hesitant say they’re worried about the side effects and that they actually might get COVID-19 from the vaccine. Whereas a much larger share of Republicans who are hesitant, they say that they feel that way because the risks of COVID-19 have been exaggerated.
Now one thing that we’ve been very worried about is the focus on only the hesitant group. That leaves out virtually of those who are kind of in a middle group who aren’t absolutely certain that they would get a vaccine. We also believe that because it’s such a dynamic situation we imagine that folks are going to be moving in between these groups as we hear more. So we’ve developed a way that we think allows us to look at all adults and look at how everyone sits on the question of vaccination, not just those who are hesitant.

We find four groups that we think better describe where the American public is at any given moment. So first, there’s one relatively large group – 34 percent – that is all for getting a vaccine and they want it as soon as they can get it. The challenge for this group is going to be aligning their expectations with the actual distribution process. Next the largest group, about four in 10, they’re generally interested in getting the vaccine, but most of these people say they’ll probably get it, although some in here say they probably won’t get it. But this is the group that is likely to be the most heavily influenced by how the rollout goes and what they learn and what they hear about the vaccine safety and side effects from their trusted sources and leaders.

Next there’s a small group, 9 percent. These lean against vaccination, but they do say they’ll get it if they’re required to. Now, one challenge here is it is made up disproportionately of those who are essential workers, those people who work outside of their home and may be at highest risk for exposure. And lastly, there’s the very resistant group. Just 15 of adults, but a very tough to convince 15 percent. They don’t plan on getting vaccinated even if it was deemed safe, effective, and free. Luckily, we may have the longest to further study and think about how to connect with these individuals as they tend to be younger and healthier, so they won’t be the first in line.

So where does this leave us at the moment? I think we have to remember that this is a very dynamic situation. Real life events and announcements are impacting the public’s reactions. We expect this to continue. And misinformation, spread intentionally or unintentionally, is a real problem. Furthermore, how the distribution process goes and whether people feel like it is fair to them is going to matter a lot to the overall state of people’s views. The other thing to remember is that this hesitant group is not monolithic, and at the moment the largest share really just wants a change to wait and see what happens to those who take the vaccine ahead of them.

And then we just can’t forget nor ignore the larger context we are operating in. We have a very divided nation politically with a population that’s facing a pandemic for the very first time in most of their lives. The politicization of the pandemic from day one, combined with our very polarized media environment, means that very different information and messaging content has been consumed by different segments of the public over the past year. There’s perhaps no better calling for the need for leadership – bipartisan leadership – to help all Americans understand the true facts about vaccination so that they can make the best decisions for themselves and their families.

Thank you for letting me share this, and I’m very much looking forward to the discussion later.
Thank you very much, Mollyann. That was – that was really fascinating and compelling data. And I’m sure we’re going to hear more from our other guests in their reaction to that. But thank you for painting the picture. And it is dramatic. It is complicated. It’s fast moving. I’m sure in a few weeks we could come back to this and things would have changed. And there’ll be more curveballs coming along.

We are going to turn – at this point in our program we’re going to turn to two members of Congress. We’re going to be joined by Congresswoman Susan Brooks by video. Congresswoman Brooks is a Republican member of Congress from a district in Indianapolis. She has served on the Energy and Commerce Subcommittee – Health Subcommittee for many years, where she has become one of the leading authorities on health security in American and abroad. And we have been thrilled to have her on this high-level panel. She also serves on a CSIS Commission on Strengthening America’s Health Security, which is focused on our – largely on our overseas programs and international engagement.

I’m going to turn in a moment to hear – for us to watch a 4 ½ minute video. Congresswoman Brooks is coming to Washington as we speak and so incapable of being with us, and kindly agreed to put this together. I’m very grateful also to her staff, Sam West, for all of his help in putting this together. Following that, I’m going to turn to Congressman Ami Bera, Democrat from California, his district Sacramento. He’s an M.D., public health authority, been very active on the Democratic side in this high-level panel, in his work in Congress chairs the Asia Subcommittee in House Foreign Affairs Committee. And served as a public health authority in Sacramento County. Was at the university system – UC system. Extremely knowledgeable and extremely active.

It was – it’s been terribly important for us in the work of this high-level panel to have bipartisan congressional leadership be part of this because this is, as we’ve emphasized over and over again, a problem of politicization and one that requires heightened leadership from the executive, from Congress, from governors, mayors, at many different levels. And particularly one that connects to those communities, as we’ve heard from Mollyann Brodie, that are feeling most impacted – disproportionately impacted by COVID-19 and perhaps feeling the least confident or the most – having the greatest questions on the table.

We also – it’s very important for our members of Congress in thinking about these options, as Katherine had outlined, the first one being: Do we need an independent panel that can come forward, pull different interests together, and change the national conversation? There are many ways in which this might be done. And we were not very specific on that. So I’m going to ask my colleague, John Monts, to tee-up the video from Congresswoman Susan Brooks, please. Thank you.

(From video.) Hello and thank you for giving me the opportunity to participate in such an important discussion today. I regret I’m not able to be there in person, but the vote schedule has been very fluid as leadership has tried to get an end-of-the-year spending package done. And unfortunately, I have to be on a flight while this discussion is taking place, headed back to D.C. I want to thank Stephen Morrison, Katherine Bliss, Michaela Simoneau, and all of the staff at CSIS...
for their work putting this panel together. The timing and the topic of the discussion could not be more important.

As I’ve said in the past, developing public trust in the vaccine has never been more critical. Monday we saw the first dose of the Pfizer vaccine being administered in our country. I’ve also been glad to see vaccine distribution guidelines be continually published and updated over the last several weeks. I believe the decision to prioritize our most at-risk populations, including frontline health care workers and nursing home residents, was the right decision.

But despite these positive steps, there continues to be a lot of false information circulating about vaccines on social media and elsewhere. I’ve also heard from many individuals who don’t understand the importance of getting a vaccine. Even if they aren’t explicitly distrustful of it, they simply don’t think it’s necessary for them to get it. I think we can all agree that the government and the pharmaceutical companies developing these vaccines have a very important role to play in educating Americans. But they can’t do it alone.

Engaging community leaders and people of influence is one of the most effective ways to reach everyday Americans. Whether it’s athletes, TV and movie stars, even social media influencers, they’re all well-positioned to reach audiences in a way that government simply cannot. And as always, bipartisanship must always be at the center of national security discussions. Make no mistake, biodefense is absolutely a matter of national security. We’ve seen far too much politicization in this country in recent years, but the health and safety of our citizens can’t continue to be one of those areas.

Truthfully, I think we’ve still got a real opportunity to make COVID an issue that brings our country together. As I’m sure you’ve all seen in the news in the last few days, we have a real shot at passing comprehensive COVID-19 relief package in the coming days. This opportunity comes after months of gridlock and failed negotiations, so I think it’s telling that the final breakthrough came not from leadership by from a group of bipartisan rank and file members in the Problem Solvers Caucus. Those members put a lot of work into this and deserve the credit for breaking through the gridlock. Just as importantly, they serve as an excellent example of how good faith bipartisan discussions can produce results that partisanship and finger pointing simply can’t.

So coming back to the topic of vaccines, the logistics of rollout and distribution are still being finalized. I know that Pfizer and Moderna have been in extensive discussions with Operation Warp Speed for months hammering out the technical challenges associated with carrying out one of the largest public health exercises in our country’s history. It won’t be easy, and I have no doubt there will be some hiccups. But there is no one better suited to handle this monumental task than the people at these innovative companies in collaboration with the absolute professionals at Operation Warp Speed. CDC, FDA, ASPR, DOD and many others – the president has assembled the very best team possible. And it’s up to us to give this team the space and support they need to do their jobs.

As a final note, I want to reemphasize how important it is that all Americans have confidence in their health care system. More than just technical logistics
and statistics data, Americans need to know that their doctors and nurses are absolutely committed to protecting their health, and that the decisions on how, when, to whom the vaccine is being distributed are being made by individuals who have been empowered to follow the science and make the best decisions possible for the good of the American people.

I hope these comments have been helpful for you all for your continued discussion. I apologize for not being able to participate live, but I sincerely look forward to hearing the results of the discussion. Stay healthy and well.

J. Stephen Morrison:

Thank you, Congresswoman Brooks, for that presentation, set of remarks.

I want to thank – on behalf of the high-level panel I also want to thank Congressman Bera’s staff, Colleen Nguyen and Ryan Uyehara, who’ve been so helpful to us over several years now in support and guidance as we've moved ahead.

Congressman Bera, thanks so much for joining us. I know it's early there. Both you and Mollyann Brodie are up early to be with us, and we appreciate that. I'm going to turn the floor over to you. Please share with us your thoughts on these big topics.

Representative Ami Bera:

Great. Thanks, Steve, and Katherine, and the whole team at CSIS and the London School for your continued work on this important issue. In addition, I just want to thank and recognize my colleague Susan Brooks, who has chosen to retire. And, you know, she was my classmate. We came to Congress together. But I’m glad that she’s chosen to continue to do work on this important issue and stay engaged.

You know, looking at it from the congressional perspective, there’s a lot to learn. And, you know, obviously the United States has performed more poorly than just about any other nation in dealing with this pandemic. And, you know, as we look forward we also have to look back and understand, you know, where we missed our messaging, reaching out to populations on, you know, just wearing – simple, you know, public health measures, like wearing a face mask or face covering, because I think that also then will help inform how we look forward in terms of our messaging and reaching to communities on vaccination and getting to that critical herd immunity.

You know, here in my own district, my home institution UC Davis received the vaccine yesterday and has started vaccinating folks. And you do feel – you know, as Mollyann showed in some of her data – that as the vaccine is getting out their public opinion is changing a little bit and, you know, folks are becoming more receptive to the vaccine. That said, we also know, you know, in some of our pre-COVID vaccination fights here in Sacramento, where we were at the heart of some of this legislation around school-based vaccinations – there is a hardcore group that is going to be very hard to reach, and we’ll have to think about how we get to that.

Steve, you mentioned putting together a high-level panel that can explore this issue both in the context of COVID-19 and the vaccination, which I think is important. But I think we as Congress have to work together to think about how
we study this and better understand it, you know, coming out of the pandemic. So we really have those lessons learned, understand the best practices, and move forward.

A couple other things that, you know, I think we have to think about, and something that I’ve certainly been thinking about quite a bit, is the behavioral psychology component of this. How do we talk to folks? You know, I was chatting offline with Cary and Mollyann. And, you know, I think we sometimes as Democrats – and I’m a Democratic member – have really focused on the healthcare aspect of COVID-19 and why you have to do this to protect your health and the health of others. But as we’re doing our deep dive in looking at the results of the election, we did see President Trump and Republican members talk about the economic impact of this.

And, you know, I think there are certain populations that if you can’t pay your rent, if you can’t, you know, put food on the table, that becomes their driver. And they were very resistant to mask wearing, to shutting things down, to taking what I would deem reasonable public health measures to get ahead of the virus. And I think as we go into the vaccination campaigns we have to think about what that looks like.

Thirdly, I’ll go back to, you know, some of my academic career in public health and at UC Davis. You know, I once had a grant to try to increase breast cancer screening rates in some of the harder-to-reach populations. And one thing we did was use a promotora model, which is really going into those communities that were harder to reach. As opposed to me coming in as an academic and saying here’s what you need to do, we looked for trusted leaders in those communities, trained them up, gave them the information, and allowed them to deliver the message.

And, you know, that really has shown, you know, in many settings to be an effective way to get a public health message out. So it’s not an external person coming into a community to say, hey, here’s what you need to do. It’s someone who already has a level of trust, arming them with the information and data and letting them deliver that information and data in the language and the methods that work within those communities. And that’s often, you know, a trusted faith leader or someone who, you know, is trusted within the school system, et cetera.

We also, you know, have to start thinking through the logistics of vaccine delivery and what this vaccine campaign looks like. And that’s something we’re certainly thinking about in Congress. You know that we are working on this final COVID-19 bill. I am hopeful we get something done. I know in the original bill that we passed back in May we were able to put $5 billion in to build up a contact tracing workforce. The hope was that we would have passed that bill in the summertime, we would have been hiring up that workforce.

That would then allow us to transition some of these public health workers into the vaccine campaign. Obviously, that didn’t happen. My hope is in the final bill that we do have those resources to help, you know, our public health systems around the country. One of the important aspects in that that my colleague Barbara Lee made sure happened was that you would – again, using the promotora model, hire folks in these communities to help with the campaign.
So there's a lot of work ahead of us, you know, with regards to building up the trust both in COVID-19 but also coming out of this. And look forward to the panel discussion. And, again, thank you for letting me be involved in this.

J. Stephen Morrison:

Thank you, Congressman. While we have you right here I just want to ask you one quick question. Congress is coming back. There's hope that there will be a stimulus bill. The negotiations are looking more promising, but of course all of this is fragile. But we have had a more promising set of turns and reports of late. We know that this vaccination campaign in the United States, which is unprecedented in speed, scale, ambition for this country, that there is a big gap of financing for the vaccination campaign – estimated by some at roughly $8.4 billion.

That is, I would think, an enormous cause for concern right now in terms of the ability to really move forward in a correct way. There's also not been any national messaging campaign. There were efforts that began in the administration and then were – and then collapsed. So we've had no national messaging and we have this uncertainty hanging over the rollout and the advent of this national vaccination campaign in terms of core financing. Are some of these issues, particularly the financing gap, being treated in the – in the stimulus bill?

Representative Ami Bera:

I would certainly hope so. I know in our original bill the moneys were there for public health and vaccinations as well as ad campaigns. I know the Trump administration has talked about a $250 million ad campaign. I've yet to see exactly what the message is and how that rolls out. You know, the Ad Council has talked about also some public health messaging. You know, when you're talking about $8 billion, we're talking about a $900 billion COVID-19 relief package potentially. So that $8 billion is the right investment to help us get the economy open, to recover, to beat COVID-19. So I think it's a drop in the bucket in this unprecedented time. And I would hope it's in the final package.

J. Stephen Morrison:

Thank you. One other comment before we turn to Cary Funk for her remarks. There was a big story today – front page of The Washington Post. And the question that it raises, which I think we'll come back to you, Congressman, to talk about this in the course of our conversation – the question that's raised is what position will the majority of Republicans take on – vis-à-vis the vaccinations? And will this issue be depoliticized or de-weaponized as a matter, or will it go the way that masking has gone and become more politicized as we move forward?

This seems to be a very fundamental and pivotal question for the future, as to where we're heading in this period of time. And I'd like to come back. This question, it does address I think one of the biggest points that Mollyann made, and as her third big takeaway, which is we have to have leadership on a bipartisan basis to address these divisions and forestall that kind of outcome that is really hanging out there as to which direction are we going to go on this.

We're joined today also by Cary Funk, director of science and society research at the Pew Research Center. Cary, you've been extremely generous to us in the work of this high-level panel. And we're very grateful to you. And we're grateful
that you could be with us today to share your thoughts in this fast-moving picture and the insights that your organization and your leadership brings to this. Tell us what you're seeing and what more you want to add to what we've heard from the excellent presentation from Mollyann Brodie of Kaiser Family Foundation.

Cary Funk: Sure. Thank you for having me here today. You know, I've just – I think I want to just underscore some of the things that Molly said from surveys from the Kaiser Family Foundation. And we see this across public polls, including Pew Research Center, that there's really a core group of Americans that appears ready to be vaccinated. They're really not going to move off of that position. And there's really a core group that appears quite resistant.

I want to focus on the middle, because they make up anywhere from 40 to 60 percent of Americans. They have, what I would say, are more of a soft orientation, either towards being vaccinated or being hesitant about being vaccinated. So this is the key group because if we're going to reach these threshold levels to have collective health benefits we need to be thinking about this middle group. Right now, they are, I think, in flux. They can be moved either direction. And that's part of why we're seeing our public polls go up and down.

I want to underscore one thing that I really took away from our most recent Pew Research Center survey is we saw that those people in the middle with this soft orientation, most of them said they would uncomfortable being among the first people vaccinated. To me, that really underscores that how people are responding on surveys is reflecting concerns around safety, in think in particular safety, and to keep in mind that how the general public thinks about what is safe may not line up with what medical experts say is safe. And so that's really a key – I guess a key factor going forward.

The other thing I want to call attention to is – has to do with our trust, our trust in government institutions in particular. We know that we've been living in an era of relatively low trust. We know that many of the people who will be delivering messages around vaccine uptake are associated with a government institution. So this can be a barrier to vaccine uptake. And we see this in our surveys as well. It tends to go hand-in-hand with people's confidence in the vaccine R&D process. We've seen that go – that go up since September and, again, in line with people's overall intention to get vaccinated.

But these kinds of – this kind of trust or confidence in the process and the people behind the process can make a big difference. You know, we see as much as almost 70 percentage points difference between your interest in getting a vaccine and not, depending on whether you have a high or low level of confidence in the R&D process. So that's just a reminder that this can be particularly challenging among some segments of the public.

And then, you know, I want to just come back to the issues of our political divisions. You know, certainly the election highlighted our deep political divides that have been there for some time. And they – and they – and the deep political divisions that arose over the handling of the coronavirus outbreak has really been a hallmark of that story. One of the things we wanted to do was kind of look beyond politics to what's driving these kinds of divisions. And one factor
that comes up there is – has to do with people’s personal concerns, worries, sense of need. That they are at risk for a serious case of coronavirus.

And that connects with people’s intention to get vaccinated. So people who don’t see themselves at particular risk are right now on the fence. About half say they’d get vaccinated and half say they wouldn’t. So this is really a key group in terms of being able, again, to reach that threshold level needed for herd immunity is how do we condense those people, who don’t see that strong personal need, that there’s a collective interest or some other way in which they could be motivated to line up for the vaccine.

So I think that – I think that just kind of tries to underscore that this is connected with politics, it’s correlated, if you will, but it goes beyond politics. There are Republicans who have higher and lower levels of concern about getting the coronavirus. And so there are ways in which we can work across lines as well.

J. Stephen Morrison: Thank you so much, Cary. That was terrific.

We’re joined now by Heidi Larson. Heidi is the director of the Vaccine Confidence Project at the London School of Hygiene and Tropical Medicine. She’s co-chair of this high-level panel and a close friend and colleague of ours. Heidi, welcome. I want to ask you to offer some remarks. This has been a historic, big week here in the United States and in the United Kingdom. You’re in London, so I can’t avoid asking you to reflect on what has happened in the U.K. this week. But I’d also like to you to offer your reflections as a global expert on what is happening here, and what you’re observing in the larger context that’s relevant to this conversation.

Today, obviously, what happens in America, our peculiar political culture, has some bearing on that, but it’s not like we exist in some vacuum and we’re not seeing this phenomenon manifest in many different places. Taking slightly different form, but nonetheless a lot of common elements around there. So, Heidi, thank you so much for being with us. Could you speak for a few minutes? Are we having a connection problem?

Heidi J. Larson: Sorry. No, it’s a muting problem. (Laughs.)

J. Stephen Morrison: OK. All righty.

Heidi J. Larson: I was carefully respecting the other speakers. (Laughs.) Which – who I hugely respect. I follow both Mollyann and Cary’s work closely. It really matters to us, because just – it’s a huge landscape. And the more we can learn from each other the better. And I have to say, the U.S. situation, aside – I mean, there’s the clear party divide in some of the sentiments, but a lot of the other phenomena are not dissimilar to what’s going on in the rest of the world. Certainly, the change – the kind of fluctuation in public sentiment. It’s been a mix of things. It’s – I mean, we’ve seen, for instance in the U.K, which is not dissimilar to some of our sampling globally, in May there was actually only 7 percent of the U.K. said they would definitely not take the vaccine. That went up 17 percent in September. And then it started to dip a big, and a little more enthusiasm – not unlike the U.S.
But in the background, as you know, we were saying, it’s very reflective of what the surrounding situation is. And people are actually – I don’t think we give the public enough credit for their efforts to do some sense-making in trying to see what’s the threat of the disease, what’s the risk of this new vaccine. And when you think back to April and May, you know, it was a brand-new virus, the fatality rates were ranging. People didn’t know – there wasn’t actually much talk about vaccines. In our social media monitoring – and we do it 24/7 around the world, 100 languages – it was mostly about masks, social distancing – is it one meters, is it two meters? Is it masks, no mask? It was mostly about the immediate how do I protect myself measures?

The language, the discussions around vaccines really started to happen during the summer, when there was a big more – things calmed down a little bit in some settings, and the vaccine narrative started coming in. And with every piece of information came misinformation. And that, again, is not all disinformation, intentional. It’s people trying to make sense of the piece and a bit feeling like, well, maybe I’ll be okay. I don’t really need to be the first one in line. I think we need to do a better job to remind people they will not be the first one in line. There are hundreds of thousands of people around the planet who have taken these vaccines. We cannot not remind people that you’re not getting it now because your first in line.

You’re getting it now because of hundreds of thousands of people around the planet have put themselves forward to have the opportunity to get these vaccines. And that’s why you’re getting it now, because it’s had this – the willingness of all these other people. Because otherwise it makes, like, you know, first flight around the moon. And it’s not. If you go on the other side of the moon, there’s a lot of people there, you know? (Laughs.) Just a bad analogy, but you know what I mean, this kind of – I mean, you’ve got the issues in the U.S., which is my real home. (Laughs.) And then here, we’ve got Brexit, which is no prettier, you know, in the sense of uncertainty and tension and polarization.

So but these thing do weigh in. And people are hyper-anxious. But I have to say, you know, to Cary, your point, which is really important, about personal worries, concerns and needs, the other thing that’s come a lot more up in discussions is the issue of will it be mandated, will I be forced to take it? And I think that’s something that, you know, we’ve got to develop the narrative on. We’re not going to – it’s not going to be a population-wide mandate because, one, we don’t have enough vaccines and the system is not prepared to deliver. So you can’t require something they’re not prepared to deliver on equitably.

But what we might see is certain situation requirements in certain workplaces – hospital settings, daycare centers. Some airlines, like Qantas, have said you can come on board if you’ve been vaccinated. I’ve been reading some sports events, concerts, going to the Haj. If you’re a pilgrim going to Haj you already need to take three vaccines and they’ll probably add COVID as a fourth. So I think we need to think about it in terms of settings, don’t get anxious about it being required, there may be more of an issue of people – enough people – there not being enough vaccines for the people who want them.

J. Stephen Morrison: Thanks so much, Heidi.
We are going to, if it’s OK with our speakers, we’re going to go a few minutes over, beyond the hour, if that’s OK. Congressman, I hope that works in your schedule. If you need to depart – OK.

So we want to turn our conversation in a few minutes to this question around the independent panel. I have a number of questions that I want to follow up on. But we’ve had a lot of ideas put on the table here. And I want to do a quick round and hear the reactions. I’m going to start with Mollyann, and Cary, and Katherine, and Congressman Bera to just respond to sort of this very rich array of observations around where we are right now and what we do we make – how do we make sense of this current situation.

Mollyann.

Mollyann Brodie: Yeah. I mean, I think Heidi used the right word. It’s just respect people. Like, respect them where they are. They – you know, they’ve had – it’s the first pandemic for most of us. (Laughs.) We’ve never experienced something like this before. There’s a lot of competing needs and issues going on in people’s lives as they struggle with this decision making. And they are trying to sense-make, right, or they are trying to do – figure out what is best for them and their family. And I think it’s leadership’s job and public health communicators’ jobs, and the rest of our jobs to try to help them make those best choices for their family.

I had shared offline, you know, I have a cousin who’s starting to get the information, her and her friends are hearing that, you know, the vaccine may cause infertility which I think is a common fearmongering attempt. But they’re not intentionally spreading that. But it’s up to all of us and to the – to help her and her friends recognize: You won’t be first in line. You’re getting it way down in the path. You’re healthy, you’re young. And a lot more information will come out. And everything we know so far about the vaccine is blah, blah, blah. And so it’s really respecting people where they are and meeting them with the information that they need to make the best decisions for their families.

J. Stephen Morrison: Thank you, Mollyann.

Katherine Bliss.

Katherine Bliss: Thanks, Steve. Just two quick points. I mean, one is that, you know, both Mollyann and Cary, and Heidi, you know, have all pointed out that there’s – even within the divisions, you know, the numbers in terms of percentages or different, you know, components of the population who may be willing or are still on the fence about taking vaccines, you know, there’s still quite a bit of nuance within those groups. And those – you know, those feelings and understandings are historically rooted in experience and – you know, and are in some cases related to diasporas and, you know, much larger connections with global conversations that go back many years.

So I think it’s both, you know, important to understand those and bring those histories and that experience to life. And the second, you know, it’s just, you know, really around this kind of what has been framed as a discussion, you know, of values – of, you know, I value the health of the community versus, you know, I value my freedom and my individual choice. And I think what everyone
has said here about, you know, making sure that information is provided to
diverse groups in, you know, ways that are meaningful and, you know, that
different groups are listened to and understood, but that that information is
provided in a way that people can make an informed choice and make, you
know, the choice that is best for them, you know, is very important.

J. Stephen Morrison: Thank you very much.

I’d like to ask Cary to offer her thoughts on what we’ve just covered.

Cary Funk: Yeah. I mean, I’ve always been struck by the degree to which we are seeing
common patterns, both in the U.S. and globally. I think one of the main
takeaways here is that the American public is not monolithic. There’s all sorts of
different reactions among segments of the public. And I want to talk in
particular about differences by race and ethnicity as well as by social class.
Lower income in particular stand out as less inclined to get a vaccine but also –
you know, but also can have a higher sense of need and awareness that they’re at
risk.

So that’s the most important thing. How do you respect people where they are is
just start to see the different ways in which people are approaching this, and to
help – and to help address their concerns.

J. Stephen Morrison: Thank you.

Congressman Bera, I want to come back to your point that Congress has to
address these issues and become more active on these matters. Now, we know
we’re about to – we’ll get through this week, and then there’ll be a break.
Congress will go through an organizational exercise in early January. There will
be the inauguration. There’s going to be a gap here, so – a critical gap, in which
the vaccination efforts are advancing forward. Of course, members of Congress
are going to be in their districts and they’re going to be engaging in their
districts.

I wanted you to offer a little more detail. What do you see – what would you be
advising your colleagues in terms of the things that they can do individually but
also the things that they might think about doing as a collective, on a bipartisan
basis, as we head into the new year. We have the immediate matter of
engagement in the districts and states of – and reaching of constituents. And
then we have the bigger and broader question of can Congress do something
new and different in this regard that will be very constructive and have some
impact? Over to you.

Representative Ami
Bera: So I the immediate term there’s 435 of us in the House of Representatives. And
we’re each a reflection of our district. And it goes back to something Mollyann
said, is let’s meet people where they are. And each of us is a reflection of our
constituents. So the immediate term, as we all go back to our districts over these
next two weeks, I think we each have a role, you know, getting that message out
and reinforcing the message using the language of the people that we work for,
our constituents and the communities that we reflect.
Longer term, you know, Dr. Fauci touched on something, and I don’t think he meant it from a public health perspective but from a continuity of government perspective. You know, certainly President-elect Biden and Vice President-elect Harris getting their vaccinations publicly will mean a lot. But I think President Trump getting a vaccine in a nationally televised way could be one of the most important things that could help us with this campaign. He has enormous influence over his supporters. And time and again anecdotally we heard on the face covering, you know, when folks were interviewed they would say: If the president told us to wear face coverings we would do it, because there is an implicit trust that he has with his supporters.

And I think President Trump should take immense credit for Operation Warp Speed and go out there. So we’re watching pretty closely how he talks about the vaccine and the messaging. Thus far, you know, he hasn’t put out any negative messages. And again, you know, I would encourage the president to take credit for this and get the vaccine to protect his own health, but also to send a message.

Longer term, I think we really do have to – as mentioned earlier – kind of take a look back and understand, you know, how we ended up where we are, but then also, you know, maybe engage the national academies and others to put together a coalition, including those around groups that are really hard to reach that really are hardcore vaccine hesitancy, and try to understand this. And then, you know, we also – it’s not just disinformation around the vaccine or around COVID-19.

This is going to be a long-term effort around, you know, multiple areas. And, you know, how do we, as Congress, think through what this looks like, balancing freedom of expression but also understanding, you know, in the age of the internet and so forth getting accurate information out there is hugely important. And we see that in the midst of this pandemic. So that’s going to be a major challenge, and something that we really do have to tackle.

J. Stephen Morrison: Thank you. I mean, it strikes me when you look at the data that was presented today and beforehand, we have a partisan problem. We have a much heavier problem on the Republican side. We have a problem with communities that – where the disparities in the burden has been so asymmetric – and we’re talking about the Black community, the Latinx community, the Native American and other Indigenous communities. So when you look at Congress you say, what can Congress do in this particular moment in time if it’s going to become more active, more vocal, more forward-leaning in messaging.

I would think that an appeal to the leadership ranks of the Republican Party to join hands with the leadership on the Democratic side to be expressing themselves publicly to the nation on the value of vaccines and the need – you know, would be enormously important – as would expressions by the Congressional Black Caucus or the Congressional Hispanic Caucus, and those leadership – those leaders of the Native American populations. What’s your thoughts on – what’s your reaction to that?

Representative Ami Bera: Absolutely. You know, going back to the Washington Post story, I think the vast majority of Republicans are, you know, as Susan said in her taped comments, are going to embrace the vaccine and encourage vaccine uptake. And you saw that
with how Leader McConnell addressed wearing face coverings in the Senate. I don’t think it was ever an issue on his end. So I do think, you know, not every Republican member, but I do think we all have a role. But I also don’t know if we’re the best spokespersons for this because we are coming from government. And if we can use our bully pulpit to empower other spokespersons who are better and more trusted in some of these communities.

In some cases, it may be someone like a Congressman Clyburn, you know, getting up there on the bully pulpit. But in other cases, it may be, you know, getting someone from that community and giving them the chance to be up there. You know, I don’t know if intentionally the media has covered this, but I thought it was great that, you know, the first person who got the vaccine was an African American critical care nurse in New York. And that was front-page news all across the country. You know, watching the media last night, you know, they were putting African American nurses and others up there talking about getting the vaccine, and how they were feeling.

And I certainly hope that continues, that you’re talking these folks who may look like individuals that we want to reach and putting them front and center as they talk about taking the vaccine. And I think that modeling may be better than my getting on television talking about why you should take it.

J. Stephen Morrison: Right. Well, you know, when the high-level panel made its first recommendation, there should be an independent forum, it was with this idea that it should not be government run or sanctioned. There’s many things that members of Congress can do, but that it should have some autonomy and it should have a representation of leadership from the communities we need to reach. So we’ve identified several of those that are falling disproportionately among those who are in the “maybe” category, or those who are on the fence, or have the greatest concerns to be addressed. And so that’s what motivated us to say at this moment in time there’s a need for this. There’s a gap.

I want to come back to Heidi and ask her, sort of when we think about some sort of independent forum, are there things we can point to as precedents for analogous situations where such a thing has been attempted and had an impact? That we can point to and say: Here’s a model, here’s an example of something that has happened? Heidi, you have the greatest depth of knowledge comparatively of thing that have been done across the world at different points in time. Can you answer that question for us, please? I think you’re on mute.

Heidi J. Larson: If I understand the question clearly, we absolutely need, I think, an independent forum. But I think there’s a role for everyone here. And I think, you know, using this pause to go back to constituencies is also crucially important because they’re – as Cary said and also was reflected in Mollyann’s work, you know, we have a really heterogeneous population. They may look like we have two populations right now, but we don’t. And I think that we need a multiplicity – this is where the anti-vaccine is getting – groups are getting so much traction. We’ve got maybe, let’s say, 100,000 anti and a million or two pro.

But those anti, which is much more homogenous, one – you know, one major entity, same messages, same tone. And then you’ve got these smaller groups. They splinter into, you know, 40 different groups appealing to different
sentiments, different trust versions. I’m sure that there are people that – you know, if Ami goes to – he’ll be – there’ll be there for him. They’ll listen. Because you wouldn’t be in the seat you’re in if you didn’t have most people behind you. So you know who you can influence. And I think there’s a whole mix of – so we need the independents. We need the religious leaders. We need community leaders. So I think we should try to think of a bit of a portfolio of approaches. But I do agree that for the particular initiative that we’re talking about what we don’t have is this kind of independent reinforcing but bringing in some different voices to the table moving forward.

J. Stephen Morrison: But, Heidi, can we point to examples where there has been for a launched in a similar setting that have been successful? Are there models we can point to?

Heidi J. Larson: You know, to me, one of the most impressive and effective ones is the Independent Monitoring Board for Polio. Because the Polio Eradication Initiative was a huge global effort. But to those who felt marginalized or, you know, distrusting of this massive global entity, you know, seeming to be run out of Geneva, or even – I mean, I talked to some people in Kano state in northern Nigeria who said, you know, they sent the Rotary up here. Do they know who we are? Rotary is Lagos. We don’t have businessmen up in Kano state. So I mean, even that kind of – so the Independent Monitoring Board is an independent body that reviews the global initiative. And they have the most refreshing, straightforward, constructively critical reports and meetings. And I think they – I mean, look at what – you know them well, Steve. I mean, taking a look and one of their reports and their mix I think is a great example.

I mean, I’ll never forget opening the page to one and they said: Our biggest problem is do we – the biggest question we have is do we have the right people for the jobs we need at this point in the state of eradication? And they were particularly talking about exactly what we’re – human security, geopolitical issues. You know for this last mile with polio, like we’re going to face with COVID, we’re on the border of Pakistan and Afghanistan. We’re in the Gulf. We’re in Boko Haram. This needs a different mix of players. But IMB was right there to call that out before we got there.

J. Stephen Morrison: Thank you. Thank you.

I want to ask Mollyann and Cary and Katherine your thoughts on if we – if we agree that we need an independent forum of – and it may not be a single forum. It could be a multitude of forums. It could be organized regionally or by state. It could be national. What would you point to when someone says: Hey, look, we got a lot of urgent business to do right now. We don’t have a lot of luxury, and time, and effort, and energy to launch off in this way. Let’s just focus on what we need to do. What’s your – what would your response be to that, and what would you point to, Mollyann?

Mollyann Brodie: There’s a lot to do. We’re just at the beginning. (Laughs.) And, you know, any – I think it’s going to take a multitude of groups. I think what I would point to is this big middle group as Cary’s defined it, or as we’ve said, the sort of wait-and-see group being very focused on how heterogeneity there is within that group and getting people who can speak to all of those concerns and be helping to assure, provide the information that’s necessary. One thing here, we have to remember
that health care providers – individuals’ own trusted health care providers and their own physicians and doctors – are people’s number-one sources. And people are going to be turning to their local providers to answer all of these questions. And having this bigger group help support that group with the information they need to actually interact with their patients and be able to talk to their patients I think will be one important – very important piece of this puzzle going forward.

J. Stephen Morrison: Thank you.

Cary.

Cary Funk: Yeah. I mean, I think that these efforts will be reinforcing each other, and that’s part of why they’re important. Certainly, we – when we’ve asked people about what will drive your sense of trust and research findings, that sense of having an independent review is something that people say, yes, that increases my sense of competence or trust in the findings. So that’s one – I think that’s one important piece. It can help drive trust among the public at large. It can help drive trust among health care providers, who then pass that on. So these things can be reinforcing and they each have a place to play.

J. Stephen Morrison: Thank you.

Katherine, your thoughts.

Katherine Bliss: Just in terms of, you know, thinking about soliciting greater conversation or input at the regional level, you know, just a couple of ideas are to, you know, work through, you know, sort the public universities, the higher education, the health centers, public radio stations, and, you know, the – either the community health or, you know, sort of the school district, social media to feature conversations that can bring parents and providers together to, you know, provide, you know, opportunities for thinking through, you know, some of the steps that would be needed to ensure confidence in those kind of smaller level communities.

J. Stephen Morrison: Thank you.

We’re getting towards the end here. I want to do a lightning round and hear from everyone. And what I’d like to put on the table is a question of what is on – what is worrying you the most as we – what is the single most important thing that you’re thinking about and worried about as we look ahead? And the flipside of that, like, what do we need to be paying the most attention to in this next phase, in this volatile, fluid, hazardous phase – full of peril, but also full of opportunity? And second, related to that, just give me a quick snapshot of what makes you hopeful that this outcome could be steered and shaped towards the right kind of conclusion that we’re looking for?

Let me start with Congressman Bera. What are you most worried about and what gives you the greatest hope?
Representative Ami Bera:

You know, I’m worried a little bit about the logistics. And also, we’re going to be vaccinating millions of Americans and hundreds of millions of folks around the world. Inevitably there are going to be some side effects. There are going to be some unexpected outcomes. And if the media amplifies that, that could make our work a little bit harder. And then something that Heidi pointed out that I think we really have to think through is if we make the vaccine a mandate we may get inadvertent pushback, as we saw with the masking. And how do we message that and do that?

What gives me hope is this resurgence of science. I mean, it is remarkable that, you know, we are at this point where we’re vaccinating folks. You know, none of us expected back in March – most optimistically we thought 16, 18, 24 months we’d have a vaccine. And it’s this resurgence of science. And hopefully that continues, and we rebuild this trust in science.

J. Stephen Morrison:

Thank you very much.

Heidi, what are your thoughts?

Heidi J. Larson:

Well, Ami stole my hope moment. But let me just reinforce it. (Laughs.) I’ll start with the hope. I’m really incredibly hopeful and enthusiastic that this is a huge opportunity to rebuild trust in science, which has really taken a beating and become highly politicized. I think we need to work at it. Things like bringing attention to all the people I mentioned that have been involved with trials, and also never before in – well, probably in the history of vaccines – has the public ever been so exposed to how vaccines are developed, to the process. We should use this opportunity. It’s been one thing that’s been missing. They hear about things when they’re told to go get it. And they’ll tell you the risks and whatever. But this is helping – we should use this opportunity to bring people along.

What am I most worried about? The safety. I’m worried about it not in the sense of – not that I’m worried about some big safety event. I’m worried about a coincidental issue that gets, you know, too much amplification by those who want to create a problem. And I am concerned that we’re ready for that. And I think that’s where we need to invest some time now. Let’s walk through what could happen and let’s get ready, because it’s – let’s just assume at some point with the millions of people we’re going to vaccinate, just by the numbers somebody’s going to have a problem – a big problem. And we need to get ahead of that and be ready for it now.

J. Stephen Morrison:

Thank you so much.

I’m going to ask Katherine, then Cary, then Mollyann, you’re going to do the benediction here for today. Katherine.

Katherine Bliss:

So in terms of concerns, I mean, I mean, you know, this panel and this discussion has really focused on the domestic issues and, you know, the fact that we’re at this amazing point, you know, this week, where several countries – many of them high-income countries – you know, are really rolling out the vaccines, you know, at this moment. And I really do hope that within the United States we can, you know, to some extent, align our domestic and international engagement on
these issues and really find a way to better support some of the international work around the vaccines, COVAX and others.

In terms of opportunities I think I would echo what’s been said. I mean, here we are in this major roll out. And it really is an opportunity to kind of reset or reignite the conversation around immunizations, you know, from the community, state, and federal levels. And, you know, perhaps not only, you know, find ways to stimulate confidence around the COVID-19 vaccines, but immunization project more generally.

J. Stephen Morrison: Thank you.

Cary.

Cary Funk: I think, you know, much of the conversation today really has to do with people’s attitudes, their orientations, their thoughts. And the next challenges really have to do with behaviors and driving that intention into actually getting vaccinated. And we haven’t really had a chance to touch on that. So there’s logistics involved in that, but there’s also inertia. Our health care itself has been disrupted by the coronavirus outbreak. So there are a number of challenges to take people’s attitudes and to drive it into action. So that’s one thing that we should be looking forward to or looking towards.

I think in terms of – the moment for science has been important. I think for all the heartache that is shared around the world, it has always been a time where there is no question how important science is to people’s everyday lives and livelihoods. So that’s been a key moment.

J. Stephen Morrison: Thank you. And thanks for reminding us that indeed we here in the United States and in Britain as well are going through a very tough time in terms of the surge. Our health system across the board has never been stressed to this level. And we’re not through yet. It could intensify. So this stress point and the fact that we are at risk of breaking in some places and we’re beginning to see these very, very disturbing signs of stress – that cannot be helpful in trying to roll out a vaccine in the midst of this – in the midst of all of this.

Over to you, Mollyann. You get the last word for today. Thanks for a wonderful presentation and congratulations on the new work that you just presented.

Mollyann Brodie: Great. Thank you so much. And thanks, everybody, for just the thoughtful conversation.

I want to amplify – my biggest worry was stated just beautifully by the congressman and by Heidi. Being prepared for when there is inevitably some sort of bad news, what public reactions will be to that. And particularly for some of the populations – you know, Black Americans who have some of the lowest levels of trust in our health care system due to a long history of systemic racism – I mean, that is where I just panic about these numbers falling, falling, falling. And we are just at the beginning. And there’s a long road ahead. And we have to be prepared at every minute.
On the hopeful side, I think that we have seen an American public that is resilient, that is, you know, fighting through some of the toughest, darkest days that they have experienced. And we see it in – you know, in the responses. We’re seeing it how engaged people are. We’re seeing it in really how passionate people are, no matter what side of this vaccine issue they’re on. And so we really – you know, we have a very heterogeneity – the – ah, I can’t say the word. We have a very diverse population who are all experiencing a very similar crisis. And I think that the way, and the resilience, the fact that, you know, we still have law and order, and people are still getting up and doing their jobs, and kids are trying to get, you know, educated I think really is what we can base our hope on. The American public has the will and the fortitude to continue to get through this. And with some proper leadership and a lot of good public health messaging, this will end.

J. Stephen Morrison: Thank you so much.

I want to offer special thanks to our staff and our colleagues. Michaela Simoneau, and John Monts worked very assiduously to make this possible here today. And things turned out just beautifully. And I also want to thank everyone on the audience that has joined us, and for your patience, and for allowing us to go a few minutes overtime here. And I want to close by just thanking the speakers that are – that have been with us here today.

It's just – it's so impressive the knowledge and expertise, the exceptional knowledge and expertise that you bring to this matter. This has been an exceptionally rich conversation and very focused. And I'm sure that it will be enjoyed, and is being enjoyed, by those who have tuned in with us. But also, your commitment and your leadership in all of the different roles that you play is terribly important in this response. And we're all in your debt for the leadership and commitment that you bring to this task. It's clearly something that is very personalized for all of you.

So on that note, I just want to thank you. And I want to thank everybody for joining us. Stay tuned. We'll be back to you with our next step as we get into the new year. Have a safe and joyous holiday. Thank you.

(END)