

Episode 54: Vaccines and Taking Care of Friends

[00:00:05] Hello and welcome to the Osterholm Update, covid-19, a weekly podcast on the covid-19 pandemic with Dr. Michael Osterholm. Dr. Osterholm is an internationally recognized medical detective and director of the Center for Infectious Disease Research and Policy, or CIDRAP, at the University of Minnesota. In this podcast, Dr. Osterholm will draw on more than 45 years of experience investigating infectious disease outbreaks to provide straight talk on the covid-19 pandemic. I'm Chris Dall, reporter for CIDRAP News, and I'm your host for these conversations. As the calendar turns to May, the world seems to be experiencing a tale of two pandemics. On the one hand, you have countries like the United States and the United Kingdom and Israel where vaccines are being steadily rolled out, cases are on the decline and the light at the end of the tunnel is becoming clearer every day. On the other, you have India and South America, which are in the midst of the darkest period of the pandemic. What do these two trajectories tell us about the future of covid-19? And what about the fact that 83 percent of the covid-19 vaccine doses administered so far have been in high and upper middle income countries? Those are some of the topics we'll be discussing on this May 6th episode of the Osterholm Update as we look at what's happening here in the United States and around the world. We'll also examine the status of coronavirus variants, discussed declining vaccination numbers in the US and the ongoing challenge of vaccine hesitancy, revisit a listener question from last week's episode and highlight another pandemic act of kindness. But first, we'll begin with Dr. Osterholm's opening comments and dedication.

Michael Osterholm: [00:01:44] Thank you, Chris, it's great to be back with everyone again. I appreciate so very much you spending time with us. As I say every week, and I mean most sincerely, we know that you have many different options for obtaining your information on covid. And so it's with real appreciation that we have you here with us today. This is going to be an interesting podcast for you in that there's a homework assignment for you. At the end, I'll highlight what we're hoping all of you will do in terms of providing us some really very important feedback of what we're doing and how we're doing it. And it's because we value so much, we want that feedback. So stay tuned. You'll get your assignment and we sure hope that you will come through on it again. Thank you very much for being with us. Today's dedication is one that is hard to describe in the sense of what the pain and the angst, the loneliness and the, in some

cases desperation, has meant for this group of individuals who for which this dedication is meant. This past week, Jerome Powell, the Federal Reserve Board Chair, laid out in a speech about the United States economy the state of where we're at at this point. He noted that while some countries are still suffering terribly in the grip of covid-19, the economic outlook here in the United States has clearly brightened. He went on and said, in the United States, lives and livelihoods been affected in ways that vary from person to person, family to family and community to community. I personally can attest to that. He also used these remarks to preview an upcoming Fed report that will show how black and Hispanic workers lost jobs at a greater rate in the pandemic lockdowns, and how the pandemic pushed mothers out of the labor force and made it harder for people without college degrees to hang on to the work. He described the results from a survey of household economics and decision making, which he said will be released later this month. There were four major points that came through in this report. Number one, about 20 percent of adults in their prime working years without a bachelor's degree were laid off last year, compared to 12 percent of college educated workers. Number two, more than 20 percent of black and Hispanic prime age workers were laid off in 2020 versus 14 percent of white workers. Number three, roughly 22 percent of workers were not working or were working less thanks to child care and school disruptions. And finally, about 36 percent of black mothers and 30 percent of Hispanic mothers were not working or were working less. This podcast is dedicated to all of you who have been unable to work, lost your jobs, couldn't find work, and who have suffered the economic, emotional and some cases even physical results of that loss of work. It is our hope that as the economy improves, that you will be part of the tide rising all ships. And in that sense, hopefully you'll be back to work, financially more secure, and feeling a sense of moving beyond this pandemic. In addition today I, of course, want to leave us on the very good news of our increasing length of light here in Minneapolis/St. Paul. I'm very happy to report on May 6th today we will have 14 hours and 31 minutes of sunlight. That's 22 minutes we've gained since a week ago. That is 5 hours and 44 minutes that we've gained since the winter solstice. And we still have another hour and 5 minutes to gain between now and the summer solstice, which is pretty darn exciting to think of we're still on that upswing. So to all of you who need your light, you're getting it. Get up early, stay up late, catch the light. For those of you in the southern hemisphere, we're thinking about you and we look forward to hearing from you next winter when we need your words of enlightenment from the light.

Chris Dall: [00:06:01] So let's start with the United States, where new daily cases are again trending slowly downward and we've seen tremendous progress in places like California, which just a few months ago was in its darkest period. You said several times, Mike, that you know less about this virus now than when it started. But what is your sense of where things are headed in the US over the next few weeks and months?

Michael Osterholm: [00:06:24] Well, let me tell you what I hope will happen, but we know hope's not a strategy, and what may happen. But we have to begin, first of all, the short term report from the US is good news. It's very good news. This week, 6 states and the District of Columbia reported less than 10 deaths due to covid. These include North Dakota, South Dakota, Delaware, Hawaii, Alaska, Nebraska. On May 3rd, 50,000 cases were reported in the US with a 26 percent decrease in cases over the previous 14 days. Hospitalizations are down 10 percent and deaths overall are down 3 percent. According to the New York Times, Oregon has experienced a 14 day increase in cases of 16 percent and a 35 percent increase in hospitalizations. Gov. Kate Brown announced that by the end of June, all business restrictions should be lifted. On April 30th, 15 counties were moved back to the extreme risk level and their restrictions were increased. Indoor dining was closed in those counties, and gyms and indoor entertainment areas were limited to six people at a time. Washington state nearby is reporting a 14 day increase in cases of 19 percent and a 21 percent increase in hospitalizations. Governor Jay Inslee removed the mask requirement at long term care facilities for fully vaccinated residents during group activities. In March, Mr Inslee allowed all counties to move to phase three of reopening and increased indoor capacity limits to 50 percent. In mid-April, three counties were moved back to phase two after surpassing thresholds for cases and hospitalizations. And according to the Washington Post, the places in the US with the highest number of daily cases per capita based on a seven day rolling average, are Michigan still at 38 cases per hundred thousand population, Puerto Rico 31 cases per hundred thousand population, Colorado 28 per hundred thousand, Minnesota 27 per hundred thousand, and Pennsylvania 25 per hundred thousand population, though all are experiencing a decline in the number of cases over the past week. Michigan has had a decline of 25 percent in cases just in the past week. Puerto Rico has had a 33 percent decline. Meanwhile, Colorado, Minnesota and Pennsylvania have declined slightly at 6 percent, 7 percent and 13 percent respectively. It is important to note that 11 states have experienced an increase in the number of cases per capita in their 7 day rolling average. This includes Kentucky with

an 18 percent increase, 14 cases per hundred thousand, Indiana with a 15 percent increase, 17 cases per hundred thousand, West Virginia with a 13 percent increase, 22 cases per hundred thousand, and Hawaii with a 22 percent increase, but it still remains low at 7 cases per one hundred thousand. In short, this is this pattern that we have been witnessing for the past month where overall we have localized what you might call warm to hot spots. And then you have areas where there appears to be very little or limited activity. There's absolutely no doubt that vaccine has played an important role in adding additional protection in our states. But as we'll talk later about vaccines, they cannot explain why there is a relative absence of cases in a number of these states. And this is that question I've been raising all along. You know, we're not driving this tiger, we're riding it. What is the virus doing right now? That would mean that we would see few cases like this. And I think we have to keep vigilant. But at the same time, we must realize that these are the best days we've had since last fall and appreciate them for what they are. So more on this in a moment.

Chris Dall: [00:10:13] So looking at the global situation, we've talked a lot about India in recent weeks and the situation there remains catastrophic, but South America is also reeling and last week accounted for 35 percent of all coronaviruses deaths in the world. So how concerned should we be about the trajectory that we're seeing in those regions and what it means for the future of the pandemic?

Michael Osterholm: [00:10:36] This virus is telling us loud and clear, it is not done with us. It is not done with us. And while we surely are focused on what's happening in the United States, there is every reason to also be concerned about what's happening globally. And I'll come back to that in a moment, just how it relates to what happens here in the United States. This past week, the case numbers have basically been stable from the previous week at about 5.7 million new cases. We understand that the underreporting, particularly from countries like India, are substantial. So we know those numbers are higher. But nonetheless, it still points out the burden of disease we're seeing that is far in excess of what we've seen previously. Global deaths continue their ascent with more than 93,500 reported last week. This is the 7th straight week of increasing deaths. Less than 6,000 deaths short of the record high reported this week of January 25th. But as you know, death is a lagging indicator. And so the cases that we're seeing now at these very high levels will be the deaths that we'll be talking about in two to four weeks. As you noted, Chris, with India, the situation continues to worsen and

calls for a national lockdown are growing. It seems quite surprising to me that that hasn't been undertaken to date, knowing that with so few tools, meaning very limited vaccine, that there is anything else that the country can do. India's seven day average for new daily cases is at about 378,500 and their seven day average of new deaths is about 3,500. As we have seen in the news media, it's very likely that these numbers greatly underreport both the number of cases and deaths. Some experts are now saying that the daily covid death toll could be 5 to 10 times higher than is being reported. While India's prime minister is hesitant to impose a national lockdown due to the economic impacts, a number of states have implemented restrictions. Per a Reuters article, India's surge has coincided with a dramatic drop in vaccinations due to supply and delivery problems. At least three different states, including the capital area around Mumbai, have reported scarcity of vaccines shutting down the inoculation centers. On Monday, the state delivered 79,000 doses after a record 533,00 just a week before. India's surge is a real concern in the region. As, for example, Pakistan, which borders India to the west, now has seen cases increase through April. Although they've started slowly declining over the past week. The country is reporting its highest average daily death toll since the start of the pandemic, brought on in part by major oxygen shortages. Nepal, which borders India and its northeast, has seen a rapid surge in cases with test positivity now over 33 percent. Seven day average new cases in early April were about 145. Now they're up to over 5,600 cases per day. Per a New York Times article, the situation is so dire in Nepal that the Health Ministry in the Himalayan nation issued a statement on Friday in which, in effect, it threw up its hands. "Since coronavirus cases have spiked beyond the capacity of the health system and hospitals have run out of beds, the situation is unimaginable," the Ministry said. The country's prime minister recently made a plea for vaccine donations and critical care medicines. If you look just around the world, also in Asia, we're seeing increases now occurring in Thailand and Laos, two countries that had quite successfully controlled virus transmission up to this point. Both are in a situation where it could go either way over the next several weeks in terms of really escalating case numbers or hopefully some control. You mentioned the issue about the Americas, particularly in Latin America. The other global hot spot clearly is, in fact, that area of Latin America. According to The Washington Post, a covid tracker for the 10 countries with the highest reported cases per capita are located in Latin America. They include Uruguay, Argentina, Costa Rica and Colombia. Uruguay, despite gradual decline since mid-April, still has the highest cases per capita in the world. Brazil, the covid activity is down from its peak in late March, but still very high. The seven day

average new case numbers is about 60,000 cases per day. The seven day average new daily deaths is about 2,375. I just want to point out that one of the challenges we have is here we have countries right in our own hemisphere in Uruguay, Argentina, Costa Rica, and Colombia. Yet the focus has been largely on India. I don't want to take away for a moment the tragic situation in India, but as a country, we must begin to look at how do we allocate our resources for foreign aid so that we help all the countries that we possibly can, particularly those who are in the most dire straits, such as we're seeing right here in Latin America. So let me just conclude on the global basis, what we're seeing in India, the Americas elsewhere is going to continue to occur globally. Don't be surprised when we see new hotspots developed, just as we saw India literally existing in what appeared to be a relative lack of cases for months suddenly turn on fire. And given the 8 billion people on the face of the earth, with the vast majority of them living in low and middle income countries, we're going to continue to see that challenge arise where countries that appeared to have either kept the virus under control or for some reason just didn't have cases show up, doesn't mean that they're not vulnerable tomorrow. And I think that India, as tragic as it is in a sense, is a classic example of that very point. So until we can vaccinate the world, which we're going to talk about in a minute, is not going to happen any time soon, we have to expect that more of these situations are going to occur.

Chris Dall: [00:17:06] This week, the World Health Organization issued an updated information document entitled Coronavirus Disease- How is it transmitted? So Mike, more than a year into the pandemic, what is the significance of this document?

Michael Osterholm: [00:17:21] Well, any frequent listener to this podcast knows that we have been immersed in the challenges of dealing with both the WHO and the CDC and about how covid-19 is actually transmitted. We were co-authors to a letter that was sent to the CDC several months ago, basically demanding that they re-evaluate this position that aerosols or airborne transmission is not necessarily important in transmission of the virus. And the WHO actually held very much the same position, even though they, too, had received tremendous input from many experts around the world in aerobiology, industrial hygiene, that, in fact, aerosols are very important. So after many years of dealing with WHO, including years where it was all about influenza, which we know also is a airborne transmitted virus, this week they came out with new wording. It was document dated April 30th entitled Coronavirus Disease covid-19- How

is it transmitted? And let me just read for you the new language that's in this document. They say, and I quote, "The virus can spread from an infected person's mouth or nose in small liquid particles when they cough, sneeze, speak, sing or breathe. These particles range from larger respiratory droplets to smaller aerosols. Current evidence suggests that the virus spreads mainly between people who are in close contact with each other, typically within one meter. A person can be infected when aerosols or droplets containing the virus are inhaled or come directly into contact with the eyes, nose or mouth. The virus can also spread in poorly ventilated and/or crowded indoor settings, where people tend to spend longer periods of time. This is because aerosols remain suspended in the air or travel further than one meter." Well, this is amazing, this language change. This was many years in coming and after much research. So the fact that now WHO surely recognizes and endorses the point of aerosols, this has a lot to do about what do we do to reduce transmission? What kind of masking or respiratory protection do we need? What kind of building ventilation do we need? What does indoor versus outdoor air mean? So this is a great step forward. Now we need to see what CDC is going to do. And it's our understanding that this week they will be posting a new document that will also address the issue from their position of the transmission of this virus. And it is understood and surely hopeful that it will mirror very much what the WHO document does. Now, this is not just an academic exercise. This is not one group of pointy heads, smart people opposing another group of pointy headed smart people. This has tremendous implications for how we control this virus. And if we look at aerosols and the complicated nature of trying to control those, particular in an indoor air environment, it now gives the priority to a whole new set of practices and activities that we need to embark upon. So let me just conclude by saying, you know, I'm really very pleased that WHO has issued this document. It will be very, very helpful moving forward. And we look forward to CDC also understanding and acknowledging this very important reality.

Chris Dall: [00:20:54] So let's talk about the covid-19 immunization effort here in the United States. The long anticipated decline has begun and the country is now averaging 2.4 million shots a day, down from a high of 3.38 million on April 13th. Several states have begun offering incentives for people to get vaccinated. West Virginia is offering one hundred dollar savings bonds for young people who get the vaccine. And New Jersey this week announced an offer of a free beer for people over twenty one who get

their first shot. So time will tell if these efforts work, Mike, but is now the time for some out-of-the-box thinking to get more shots in arms?

Michael Osterholm: [00:21:30] We have arrived at a time that we fully anticipated where the number of arms wanting vaccine doses was less than the number of doses available, something that we had not experienced up until these past several weeks. It is important to note that the vaccine program in the US has really exceeded all of our expectations, if you think back to where we were in November and December. Having served on the Biden/Harris Advisory Board on covid-19, I can tell you that we had discussions where it was really debated would the administration be able to actually deliver on 100 million doses of vaccine in the first hundred days? Remember that? 100 million doses in one hundred days. Working closely with the manufacturers, the administration delivered on 220 million doses in one hundred days. So that is remarkable. And I give them great credit for that. But now we are at this point, now we're at the tipping point of things changing. As we have discussed, 247 million vaccine doses have been administered in the US. That amounts to about 150 million vaccinated people. 44 percent of Americans have received at least one dose. 31.8 percent of the population is fully vaccinated. However, it varies a great deal by geographic location. The states with the highest vaccination rates include Connecticut and Maine, with 40 percent of the population fully vaccinated, followed by Vermont to New Mexico at 39 percent fully vaccinated, and Massachusetts, Rhode Island and South Dakota, with 38 percent of their populations fully vaccinated. New Hampshire still leads the percent of people given at least one dose, with 61 percent of the population vaccinated. But we have the five states with the lowest vaccination rates and remain the same as last week. These states include Tennessee and Georgia, with just 25 percent of our population fully vaccinated and Mississippi, Alabama and Utah with 24 percent of their population fully vaccinated. And these numbers are only just one percent higher than they were a week ago. The pace of vaccination is surely slowing down. The current seven day average of new doses administered is down to where it was in early March, around 2.3 million doses per day. This is down 32 percent from the peak of 3.4 million doses per day just three weeks ago. To really sum this up, I can say, as with the US overall, most states do appear to be at or near their covid vaccine tipping points. That point we talked about in previous episodes in which the supply is outstripping demand. While this may not be as big a concern for states that have already vaccinated large shares of their population, i.e. more than 60 percent. About 1/4 states have not reached 50 percent,

which is well below coverage levels likely needed to drive down the risk of outbreaks going forward. We must continue to remember that. Furthermore, in these states, the pace of vaccination is even below that of the national average, which by itself is decreasing. The fact that most of these states are also seeing declines in the rate of first dose administration suggests that they will be important targets for any efforts to generate increasing vaccine demand. A report issued this past week by Kaiser Health, another one of their excellent reports. This report goes into great detail on the share of adult populations that has received at least one dose versus the daily rate of first doses administered by the states. It also emphasizes at the lower end of vaccine coverage, less than 50 percent of the adult population has received at least one dose in 13 states, as I mentioned, including six that are below 45 percent. 9 of these states are in the south, and in all the daily rate of first vaccinations per one hundred thousand is well below the national average. Moreover, as I noted, most of these states are experiencing declines in the rate of first doses administered. This report summarizes the results by stating that states that demonstrate a combination of low overall vaccination coverage, along with slow and declining vaccine uptake, raise the greatest concerns. These 13 states really have to be targeted in the days ahead, or else we might see another Michigan show up in one of those states. This is a point that we've raised over and over again. And while we'd like to see vaccination rates increase in all states, in these states in particular, we must, we must improve on the vaccination rates or we surely could see more Michigans happen. So we no longer, I believe, have that threat of a nationwide global surge like has been seen in India or even we experienced in November of last year or January of this year. But we do have risk for these localized state outbreaks to be substantial. Make no mistake about it, Michigan was hell on earth during the time that that surge occurred in that state. And we don't want to see these other states have the same thing. So we're at this tipping point now. We're going to have to adopt new strategies for how we're going to deliver these vaccines. And but first of all, we have to recognize that by hitting this tipping point for a number of states, we really, really have a challenge on our hands.

Chris Dall: [00:27:19] So there have been reports this week that the FDA will soon authorize the covid-19 vaccine for 12 to 15 year olds in the United States and that Pfizer says it will seek clearance in September for its vaccine to be used in children ages 2 to 11. So, Mike, do you foresee challenges in getting younger people vaccinated? Is it going to be the same type of hesitancy that we see in some adults?

Michael Osterholm: [00:27:42] As someone who has spent the better part of his career working on childhood immunizations, I can say with some certainty the answer to that is yes, it's going to be a challenge. We have already seen challenges with regard to routine childhood immunizations, with long track records of safety, programs in place to drive pediatric vaccines, for example, forward in light of school health and even immunization laws requiring such vaccinations. And in recent years, we have witnessed the challenges of maintaining high childhood immunization levels in many of our states, despite the legal tools that public health, schools and the community in general have had. Given the challenges with this virus, the political implications, the sociological implications, I think are going to pose even more challenges than we've had with routine childhood immunizations. So, to me, it begs the point that right now we need major efforts to understand community by community, zip code by zip code, block by block, how and why we are going to be able to vaccinate these kids in such a way as to basically take them out of the big picture of disease transmission. Now, let me remind you that amongst all the age groups, this is the group that tends to suffer the least amount of clinical disease and serious disease. But make no mistake about it, we saw with B117 a number of very seriously ill children and children died. So this is not to be taken lightly. But at the same time, we're going to hear from people saying, well, you know, the risk is still very, very low for them to have serious disease. And I don't know if I trust the vaccine. And that may be the bigger challenge. And there will be an entire list of all the same arguments we hear over and over again. So at this point, public health must work with the medical community, our pediatricians and fellow practitioners. They must work with the public health agencies at local, state and federal levels to put a full court press on this issue. And it won't be the same. There is something very different about trying to deal with kids and vaccines than dealing with adults. At this point, I just urge that we actually have comprehensive plans that will address every community and know that it will be different. Are you talking to rural or urban? Are you talking to individuals from the BIPOC community? Are you talking to people who are essential workers? People who have lost family members due to covid-19 and those who have not? Every one of these factors will play a role in a parent deciding whether to allow their child to be vaccinated. So now is the time for us to gear up. Do not expect that these vaccines will just magically roll off the table onto the arm of an individual child. And it's going to be important from the epidemiology of this infection, we have just seen with B117 in particular, the role that kids can play in the transmission of this virus. So

not only to protect your child, but to protect your other family members, protect the community, it's going to be so important to get these kids vaccinated.

Chris Dall: [00:31:20] Globally, we have the opposite problem that we're seeing here in the United States, there are not enough vaccines to go around. I cited some of the statistics in my introduction. What can be done at this point to boost the global vaccination effort, particularly in low and middle income nations?

Michael Osterholm: [00:31:39] We are in a very, very confusing and difficult period with regard to the global distribution of vaccines. We are at a period where I think we have numerous challenges in getting vaccines to low and middle income countries, and we're not always clear about what those challenges are. For example, we've continued to hear about intellectual property issues and that if companies were just to give up on those IP issues and release them to other companies around the world we could greatly improve vaccination levels. I have to tell you, I'm not an expert in intellectual property. I'm not an expert in making vaccines. But I talk to a lot of people who are in those businesses. And I can tell you that's not the issue. People will make it the issue because it's an easy one to identify. The companies have already agreed that if the manufacturing facilities and the expertise to make the vaccines are available in countries around the world, they will provide the intellectual property for those countries and companies to move forward. What their concern is, is that just releasing IP as such meaning that you just basically give away what you've done, you in a sense, reduce the willingness of these companies to undertake future efforts where there is some effort to gain control of what they've done from a technological standpoint and from therefore a financial standpoint. None of these companies are holding a gun to the head of anyone. Right now they understand the need to get vaccines out. Our problem is we don't have the international manufacturing capacity. Our problem is we don't have the expertise in making the vaccines. Our problem is we don't have supply chain sufficient today to supply many of the critical components that are required to make these vaccines. Our problem is, is that these are technologically difficult vaccines to make. In particular, namely the mRNA vaccines, the adeno vaccines. And no one just can come in off the shelf and do it. So the challenge we have is how are we going to build up that capacity or will we? Remember, originally the plan was to provide low and middle income countries with about 20 percent of the vaccine needs that they could identify in that first year. That was aimed largely at health care workers and older individuals. But we know

with variant development, we now have to consider every infection around the world as a critical, preventable infection. And I don't think the world really has envisioned that yet what that means. That means we have to vaccinate the world or a very large part of it to drive transmission down as much as possible so that we don't see additional variants develop. So I think at this point, our country surely needs to take a step back. We are now beginning to hoard vaccine in a way that couldn't even have been imagined 8 to 12 weeks ago. We need to understand how we're going to distribute that vaccine. What role will COVAX, the group that, as you know, is under the auspices of the World Health Organization with support from various countries as well as foundations, what role will they be? What role will GAVI, another organization that has been largely responsible for disseminating vaccines delivering them, how will that all play out? I keep coming back to the fact what we need is another Manhattan Project and a Marshall Plan together and as quickly as possible. Don't talk to me about three years from now or four years from now. The variants are developing every day. As I told you, I just heard of two new variants this week that have spun out of various outbreaks. So this is a time for countries around the world to acknowledge that we're all in this together, that as much as there will be reluctance to share vaccines when people perceive there's not enough for their own country, we have to be careful to make sure that that perception doesn't occur when it's not true. Like the United States, we have more than enough vaccine right now. We're going to see increases in delivery over the next several months. But how do we deliver that vaccine? I mentioned earlier the point about India. And then I also commented on the fact that in Latin America we see even higher rates of disease. How are we going to distribute that? I know that COVAX, through GAVI, has distributed vaccine to a number of countries already, and they're doing, I think, as good a job as can be done. But they don't have the resources from a vaccine manufacturing development standpoint to get adequate vaccine doses to really break the back of transmission in many of these countries. And then we're going to do that. And finally, don't expect just because you may live in a low or middle income country, that everybody's going to take the vaccine even if it's available. We have the same challenges likely working there as we do here in the United States. So we need to understand there will be real efforts needed to actually educate the public to support programs for vaccination and don't think it's just enough to send vaccine to a country and then assume it's all going to be used in the way that it should be and could be. So, in short, this is an area that some of us are spending a lot of time working on right now. And this, I think, is critical. We want to save US vaccines right now, stop transmission in

low and middle income countries. And the way we're going to do that is we got to have a vaccine for them.

Chris Dall: [00:37:26] The vaccine discussion brings us to our listener email segment because this week we received several emails wanting to know your reaction to recent comments made by podcast host Joe Rogan about the covid-19 vaccine. For the record, his comment was, quote, "If you're like 21 years old and you say to me, should I get vaccinated, I'll go, no." So, Mike, what would your response to Joe Rogan be? And furthermore, how much of a challenge is it when you have someone with a very large platform making these kind of comments?

Michael Osterholm: [00:38:00] As many of the listeners may know, this podcast series actually originated with my first podcast with Joe Rogan on March 10th of last year. I spent several hours with him in his studio. It was a far ranging discussion. I felt like he understood it, got it, but was a very positive discussion. Since that time, I've offered to go back and provide updates, to provide information that might be helpful in his audience understanding the challenges with covid-19. The episode that I did happened to draw 15.5 million downloads. So you get an idea of the reach that Joe Rogan has. It is unfortunate that this situation happened because there are many listeners who believe Joe Rogan's virtually every word he says. And I would love to use this as an opportunity not just for here in our podcast, but to get somebody back on Joe Rogan, I'm willing to do it. I know Peter Hotez, who has been on is willing to do it, so that we can provide an update and have him listen to what the new facts are. You know, I think at the time when I was on Joe Rogan in March 2020, you know, he was quite shocked when I said I thought that this pandemic could easily result in more than 480,000 deaths. And, you know, he kind of shook his head in disbelief. And as you note today, we're at 570,000 deaths. But I think it also points out the fact that there has been consistencies and messages, there has been issues that he could help highlight that show what we can and must do about this pandemic. So, you know, I'm going to give Joe maybe the benefit of the doubt right now to say I hope that he will use this opportunity to set things right and to actually invite in the kind of expertise that can share with his audience the facts. Now, he has kind of walked back the statement that he made, but I'm not sure he really walked it back. It's kind of a debate right now. When you read what he has said, does it, in fact, really mean he believes that he needed to change the message that he sent with everyone? So, Joe, we're here. We appreciate

you and your audience. And if we can help put the facts out there, we must, because your audience are the same people we want to protect like everyone else in this country. And I would not want one of your audience members to develop covid-19 and die because of the fact that he or she believed that when they heard you say don't get vaccinated, that was not the reason why they didn't and subsequently became infected and had such a terrible, terrible outcome.

Chris Dall: [00:41:03] Our next e-mail comes from Laura in Massachusetts, and she pointed out to us that we may have missed something last week in the answer to a listener question about vaccines and pregnancy. Specifically, that question was from the mother of twenty nine year old twins who were hesitant to get the vaccine because they were planning to get pregnant. And you cited the safety data on vaccines and pregnancy. Laura wrote to us, "I think that you missed an important part of some people's concerns in your answer to this question. There was actually a myth out there about the covid-19 vaccines having a negative impact on fertility. This is, of course, not science based. However, I think that addressing this concern is an important part of the response to people in the situation."

Michael Osterholm: [00:41:43] Thank you, Laura. You are not the only listener that picked up on that and shared that with us, but your message was received loud and clear. And you're right. You're absolutely right. When I answered that question, I was thinking about the issue of safety to the fetus. And in fact, with further exploration this week, we have found a number of different locations where on the Internet and in personal presentations, people have raised very serious challenges to the fertility issue with this vaccine. And I can tell you it's just absolutely not true. There's been no evidence whatsoever that supports that it has any reduction in fertility nor biologically why would it? You know, it's like the idea that, you know, if I take an aspirin, my head is going to fall off. You know, there's no biologic possibility there. And so I just want to confirm that you're right on the mark with this. Thank you for bringing this to our attention. For all those people who are listening and hoping to get pregnant, all I can say is good luck. We're all supporting you. But please get vaccinated as soon as possible, if not so that you have the most uncomplicated, beautiful, wonderful pregnancy any woman could expect, knowing that your fertility was not compromised and your safety was not compromised in that process.

Chris Dall: [00:43:14] So I want to go back to some comments you made in your introduction, Mike. We are now more than a year into doing these weekly updates, and we're starting to think about what this podcast looks like going forward. So do you want to let the listeners in on this conversation?

Michael Osterholm: [00:43:32] I do, and this is your homework assignment. Again, I can never adequately thank you for being part of this podcast family. We at CIDRAP appreciate it more than, you know, the kind of emails and follow up we get from you is remarkable. An example is Laura's very thoughtful email and the listener question just now. And after doing this for more than a year, week after week after week, we've thought about the fact, are we really providing a service for you that's helpful, that's worthwhile? Or could we do better? Could we do something that would be more helpful to you and your everyday life in dealing with covid? We're asking today for more feedback. Should we continue to do these weekly podcasts? Should they go to every two weeks? Should we have a different format? Should we use some other approaches that you might find helpful? I've had more than a few write to me and say stop all that mushy stuff you do, OK? You know, stick with the facts, stick with the science. Others of you have said, could you spend more time doing acts of kindness? And so we know that we're never going to hit the absolute perfect point for everyone. But for the most part, we want to make certain that we're serving your needs. So I'm asking you today as your homework assignment, please provide us feedback on what you want and need. For example, should the podcast be a weekly event? Two, is the format something that should be changed so that you get more important, relevant and timely information? Three, do we provide too much information? Some of you have suggested from time to time, cut down on the numbers, too many numbers. And so I would ask you right now, please help us. I promised you from the very beginning of this pandemic, we'd stick it out through the pandemic with you. We're not going to give up. And that promise still holds, but it doesn't mean that we don't learn how to do it better. And you're the people that can teach us. So with that Chris, I hope that we get feedback and emails. Maya can't wait to read them all with you and me and the other team members. And we will take that information and within a week to 10 days, we hope to be able to come back to you with new plans or revised plans on how we can best do this podcast.

Chris Dall: [00:46:12] Now to our latest act of kindness from an Osterholm Update listener in Wisconsin. Can you share it with our listeners?

Michael Osterholm: [00:46:20] This is another one of those acts of kindness that just warms my heart so much, gives me hope, just gives me lots of hope. This is from Sandra. She writes, "Thank you for the weekly podcast. It has been very helpful to me as an informative source, as well as a place for finding encouragement:). Lighter every day. I live in Wisconsin. I am Sandra, originally from Columbia and with family in Spain and am now a US citizen after studying and working in the US for over 20 years as a QA engineer. I've worked on projects that made ventilators for the pandemic. My mom, Chris, who is 80 years of age and pictured below," and I must say a wonderful picture, "Joined us 10 years ago. Even though we feel deserving of the benefits we have in the US, there is no one day that we take it for granted. My mom received the vaccine the first day it was available in Madison, Wisconsin. During the lockdown, my mom joined every single Zoom available for her for informational and social interaction. As part of a Latino senior group, she volunteered to call seniors in the area who felt isolated because of the pandemic, but also who were struggling because of the language barriers. She kept them company with conversation and provided resources to find out more about the vaccine and encourage them to get vaccinated. She called them regularly to check on them and reached out to group leaders if she felt someone needed follow up. I always say I want my mother's energy, not when I'm her age, but now. She is an example of an act of kindness. Sincerely, Sandra." Well, thank you so much. And to you, Chris, we appreciate all the efforts you're doing to help all of us get through this pandemic. And as we move towards the final part of our podcast today, I'm going to come back and reference you, Chris, and what this means. And so, Sandra, thank you. Thank you, Chris. You truly have provided us with an act of kindness.

Chris Dall: [00:48:31] And a reminder to our listeners that if you want to share your pandemic act of kindness with us and our listeners, please email us at OsterholmUpdate@umn.edu. Your closing thoughts today, Mike?

Michael Osterholm: [00:48:43] First of all, thank you again for being with us. Thank you for working through all of this complicated information. The highs and the lows, the ins and the outs. Let me just make no mistake about it, we're in a much, much better position with this pandemic today from a United States perspective than we were just six weeks ago. And I want to thank all of the individuals who made that possible. The vaccine manufacturers, the government officials that helped facilitate this manufacture

and delivery process, the vaccinators, the state and local health departments, the medical centers, the private pharmacy companies. I can just go down the list. Even today, the national guard is helping out in many locations to deliver vaccines. Now it's for us to do our job. For all those who have been vaccinated, congratulations. Yes. For those who have not yet been vaccinated, please get vaccinated. It could be not just your life you save, but someone else's who you may transmit the virus to. Get them vaccinated. As I said last week on this podcast, also, please make it a weekly goal to find two people you know, in your neighborhood, you may not even know them well, to have that discussion about vaccination if they're not vaccinated. Help them come to that point where they will and do whatever you can. If everybody could do two people a week, think how that would spread. So we're hopeful for that. Today, I'm going to, in that light, share the words to another song that means a great deal to me. As you can probably tell you, music, old music in particular, the golden oldies, have always meant a lot to me. This is a song by Elton John, written by his longtime collaborator, Bernie Taupin. It was John's third US hit and his second to reach top 40 after the breakthrough success of Your Song. The song, entitled Friends, was not the follow up single to Your Song, but rather the title track and the theme song for a movie, Friends, starring Sean Bury and was included on the soundtrack. It was the only hit single from that LP. This song was recorded in September of 1970 and it was released on my birthday in 1971. As I share these words with you, there's a reference to a lighter highway. And I want you to think about this highway. It's not just a road. It's an experience in life, it's what you've been through in the past year and a half. It's whether it's how you relate to your friends, it's how you use the Internet or lack thereof. It's where you're able to travel or not travel to. But think of it in that regard, it's about all your life. So here we are, Friends by Elton John. 'I hope the day will be a lighter highway for friends are found in every road. Can you ever think of any better way for the lost and weary travelers to go? Making friends for the world to see, let the people know you got what you need. With a friend at hand, you will see the light. If your friends are there, then everything's all right. It seems to me a crime that we should age these fragile times shall never slip us by. A time you never can or shall erase, as friends together watch their childhood fly. Making friends for the world to see, but the people know you got what you need. With a friend at hand, you will see the light. If your friends are there, then everything's all right. Making friends for the world to see, let the people know you got what you need. With a friend in hand, you will see the light. If your friends are there, then everything's all right." Find your friends. Reach out more now than you've ever reached out. If you have friends you

have not connected with for months, years, now is the time to do it. This is our pandemic response now. Dammit, we're not going to let this virus hold us back anymore. Reach out. Even if it's uncomfortable, reach out and be friends to those people who are your friends by remembering the extra special things you could do. And if everybody did that, we would begin to see our conversion from this dark, dark period to hopefully a much lighter period being one with a much greater sense of revival. So, yes, go out on that lighter highway, for friends can be found on every road, go find them. And when you do behind. Be patient, be thoughtful. Remember, we're all struggling, trying to get through this crazy time. Are we at risk or are we not? Can we do this or can't we do that? Just remember that we are going to get through this together and we're going to help everyone we can get vaccinated. And your homework assignment is front and center. We expect to see wonderful reports come in about what we can do better. With that, I just thank you. Thank you so, so much for spending time with us. Be kind. Be patient. And be safe. Thank you.

Chris Dall: [00:54:25] Thanks for listening to this week's episode of the Osterholm Update. If you're enjoying the podcast, please subscribe, rate and review and be sure to keep up with the latest covid-19 news by visiting our website CIDRAP.umn.edu. The Osterholm Update is produced by Maya Peters, Cory Anderson and Angela Ulrich.