# Episode 29

**Chris Dall:** [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.

**Chris Dall:** [00:00:42] It's October twenty ninth and more than eight months after the covid-19 pandemic began, the situation in the United States is starting to look eerily similar to the spring and summer, but on a larger scale. Well, those earlier waves were marked by surges in certain hot spots around the country, the coronavirus is now spreading uncontrolled in almost every state in the nation. Hospitals are again filling up with sick patients. And despite improvements in care, covid-19 deaths are rising. And the "we're all in this together" spirit has been replaced by coronavirus fatigue and anger. As winter approaches, many Americans are worried about getting infected and wondering how they're going to get through the next few months with their physical and mental health intact. So for today's episode of The Osterholm Update, we're going to focus on how people should be approaching the coming months, what they can do to best protect themselves and their loved ones, and how they can prepare themselves mentally for the long haul through the covid-19 winter. But first, we'll begin with Dr. Osterholm's welcome and dedication.

**Michael Osterholm:** [00:01:38] Thank you, Chris. And welcome back, everyone, on our podcast today. It's a real pleasure to have you. And again, thank you so much for spending your time with us. We know you have many other options, and so it's a real honor to have you with us. At the same time, I also just want to say and for some of you, I'm sure this may not necessarily resonate, but I think for many of you it does. I really can't begin to put into words the meaning of this podcast family that we've developed. In the communications we get from you on a weekly basis are just remarkable, thoughtful, honest, sometimes painful, but honest, sometimes kind and honest. And so from that perspective, you know, we really appreciate this relationship and never for a moment do we take it for granted. So thank you for being with us. This week I want to dedicate it to a group of individuals for which I actually have had a forty five year history of being involved with. And in fact, I would even go so far as to say that when I first started in this business, I was hardly dry behind the ears. I had a mustache that no one could actually see because it wasn't thick enough at that point in my life to actually see it, and they were there to mentor me through that time period. And these are what we call the infection control preventionists. They used to be called nurse epidemiologists, which in fact we surely had more than nurses, infection control practitioners. These are the people that are responsible for keeping our health care systems as safe as possible so that you don't go into the hospital or have received care at a medical clinic and end up picking up another infection. They are constantly going through countless documents and recommendations to stay current of the ever changing covid-19 pandemic so that the numerous community and the large academic based hospitals and health care systems in this country are providing the best and the safest care. They are constantly balancing the need to protect the staff also while caring for the patients. So my hat is off to the infection control preventionits, thank you for all you do and for the number of lives you save that one will never know. But if you hadn't been there doing what you do, some family would know. So thank you very, very much.

**Chris Dall:** [00:04:10] And Mike, before we get started, I understand you have some news about new resources for the podcast.

**Michael Osterholm:** [00:04:16] Yes, I'm actually quite excited to announce and it's something that I had promised we would announce one day is we have now developed the OsterholmUpdate.com website. That's OsterholmUpdate.com. It's not live yet, but it will be live within about a week. And this is a place where you can listen to all the episodes. We will publish your acts of kindness discussions. We ask that you submit those to us through The Ostrum Update email and we will review those and publish them. We welcome pictures, whatever we want to hear about the stories of kindness.I think this will be a robust site that you'll enjoy very much and we'll make sure that you are all aware of it. Next week I'll talk more about that. But it's coming. So get ready to send us those acts of kindness examples and realize that, you know, for some people I know, you're very humble and you'll say, well, I'm not going to tell people about an act of kindness I did because I just should do it. I understand that. Thank you. That's very thoughtful. But please just share with us, even if it's not with identifying information of any kind so we can share with others, you know, it's kind of we take care of each other here. So this is the audience of this podcast beginning to interact even more on an everyday basis with the rest of the audience. We are one big family and that's what families do.

**Chris Dall:** [00:05:43] So, Mike, we start every episode of the podcast with an update on the trajectory of the pandemic in the United States and the rest of the world. And at this point, I'm running out of ways to ask this question. But given the trends that we're seeing right now, either here or in Europe and other parts of the world, how bad do you think things are going to get?

**Michael Osterholm:** [00:06:02] You know, it's exactly where we've been projecting it would go. If you've been listening to this podcast over the course of recent months, you know that I've been extremely concerned about what would happen after Labor Day. And, you know, I think that there are some who would rather I had not projected those kinds of numbers. One, I think some really believe they wouldn't happen. And two is they just don't want to face the reality. But for us to understand what we can do about it and how we can live with it, how can we prevent it, we have to understand what's coming. And as I just said a week ago on Meet the Press, we are approaching the very darkest days, the darkest weeks, the darkest months of this pandemic. And we just have to know that. I'm going to give you a lot of ways that we can deal with it and much more effectively. But I think that it's really important to understand that the combination of pandemic fatigue, that sense that I do believe in the pandemic, I did do what you recommended to me to do, to distance myself, not to get into big crowds, etc. But, you know, it's been so long. It's been eight months. I can't continue to do that. And these people get done with the virus before the virus ever gets done with them. Then you add in the sense of the holidays coming into play here. You know, we've been talking about why you don't want to be at restaurants and bars, why you don't want to be at funerals and weddings. You don't want to be in all those events where you might be exposed and watching just how many of these events do result in very, very serious outbreaks. Right now it's the holiday season, we see people want to go to church, we're seeing an ever increasing number of outbreaks associated with churches. School events, we all want to be part of our kids' lives and we want the kids to live as normal life as they can in this covid time. Yet we're seeing many outbreaks right now associated with sporting events and social events associated in high school students. So that kind of pandemic fatigue has set in and we get it. But, you know, failure is not an option here in that sense, that a failure means that someone's going to be seriously ill or die. So we'll talk more about that later today. But that's one issue. The second thing is just the growing percentage of people who have what I call pandemic anger. I think the election is surely exacerbating that. As we get closer to the election, we're seeing the division that's occurring in such a big way, even in families where some people believe that this is a serious problem, they're doing what they can to take every step to protect their family, their loved ones or colleagues. And they have friends or family who think that this is a hoax. They believe that, in fact, as soon as the election is over, this pandemic will go away because it was all politically motivated. This is hard to try to ask them to do the kinds of things that would reduce the risk of transmission because they don't believe it. They're angered by the fact you suggest that they distance themselves or that they somehow change their social lives or that they wear a mask or any of these issues like that. So you add pandemic fatigue, pandemic anger, and then the indoor air. You know, you couldn't really create a better perfect storm for transmission. And so, as you may recall, when we hit Labor Day and we were thirty two thousand cases and I said it's going to go, it's going to blow at this point, you know, right now we've seen the fastest growth in the last two weeks that we've had literally since July. And this one, this growth, is going to be nationwide largely, and it's going to keep right on going. Right now, yesterday, we reported seventy four thousand three hundred twenty three cases, up 40 percent over the course of the last two weeks. We saw five hundred and thirty four deaths, it's up 14 percent. While the deaths are still lagging behind, remember, they are a lagging indicator that we're going to see those two to five weeks down the road before they start to catch up. We are very definitely going to go blow right through one hundred thousand cases a day. Think about what we felt when we were at thirty two thousand cases a day in April, or when we hit sixty seven thousand cases a day in July. It couldn't get worse, and it's gotten worse, and right now the upper Midwest is that house on fire. We're talking to intensivists in hospitals for this area. It's a nightmare scenario for them that is going to broaden out throughout much of the country. And I think we have to just understand that we're going to be in this for at least the next 12 to 14 to 16 weeks. And it's important to understand this, not because I'm trying to make you feel bad, but you got to know what you're up against, but that we can deal with it, we can deal with it. And what I mean by up against is that I'm looking for the light at the end of the tunnel of when we might start seeing vaccine in our communities. And, you know, between now and then we've got the holidays. We couldn't have a more difficult time in terms of socialization, people getting together, you know, all the emotions of the holidays. And we'll talk more about that today, too. So at this point, just please understand that this is going to get tough, but you now know it. You won't be surprised. It's not like you have to wake up in the morning, go, "Oh, my God, what's happening?". You knew it, OK? And by knowing it now, we can start in a positive way to deal with it. And that's what I think is really critical. Now in terms of other areas around the world, let me just say, you know, the Europeans had done such a great job of responding after last spring. They really put together the kind of distancing recommendations that kept the virus transmission limited through much of the early summer. But what they did in August in most of these countries is they let the breakup quickly because they thought they had won. They were done. This virus doesn't go away. It is there. It's like that coronavirus forest fire I keep talking about. The embers are there if you just allow it to come back, and put it near some wood that it can burn, it'll start its fire up again, and that's what it did. This time, it took off. If you look right now, France has right now, one of the hottest countries in the world, far exceeding the case numbers we're seeing per population basis here in the United States. We're seeing increasing transmission throughout much of Europe, even to the extent that, and this I bring up only because it hopefully will add context, Sweden. How many times have we talked about Sweden and the miracle of Sweden and how they did it right? Herd immunity? Right now, their current spike in cases has officially blown right by the peaks they saw in spring and early summer. And they're clearly on a pathway to much, much higher numbers. Today, the Uppsala University website just announced that per Swedish government rules and the new Uppsala County rules, that they are basically going into a partial lockdown. It starts October 20th. It runs through early November. It is very likely it will be extended. You have to stay off public transport unless absolutely essential travel. They're urging you to reduce contact with people unknown to you, you have to stay out of indoor gathering areas such as non-essential shops, gyms, swimming pools, sporting arena meetings, etc., and that this is going to continue for some time. And the other thing is that they had another big change in October 19th in that local counties now within Sweden have the right with oversight from national health authorities to make local rules stricter than the national rules. This is something new. And the lockdown in Uppsala has basically been now duplicated in areas of southwestern Sweden, including areas around Lund and in close to Denmark. And the same thing is happening there. So that just think of all the rhetoric, how many hours have been spent arguing about how Sweden had finally hit the sweet spot with the issue of herd immunity and that they knew what they were doing and how they were doing it. And we kept saying, no, just wait, no, just wait and look what happened. And so, you know, I think we're trying to interpret these data across the world, as, you know, with as much care and responsibility as anyone. But I can tell you right now, most of the world is still highly vulnerable to this virus. And we have to understand that. The best chance we have to save lives, to bring back a semblance of what we once were, are going to be these vaccines. And we've got to know how important they're going to be. So we just have to get there. That's our job. Bring us all there out of the wilderness to the vaccines that's we want.

**Chris Dall:** [00:15:55] CIDRAP last week published its latest covid-19 Viewpoint, which looked at how a covid-19 has affected the drug supply chain. Mike, you said this is one element of what you're calling the shortage trifecta. What can you tell our listeners about that report? And what of the shortages are you concerned about as we head into what could be a months long surge of covid-19 cases?

**Michael Osterholm:** [00:16:14] When we talk about the epidemiology of covid-19, as I just did, and what's happening with the number of cases, I want to be really clear that while we tend to talk about numbers, we never forget that these were individuals who were someone's loved one. They were someone's son or daughter. They're somebody's father or mother. And so I just want to bring back the humanness to this, because otherwise it becomes easy to be abstract and to forget about what this is really all about. But having said that, let me just remind you that I just talked about number of cases. Ultimately, another very important number here is what is the case fatality rate? Who has serious illness or dies? And this issue around this trifecta of shortages is really very much about that. And I've identified three key areas that we have to monitor constantly to understand what kind of care will patients who are severely ill or even moderately ill be able to have access to? And what will that care do to their outcome? And if you look at the three trifectas, one is not hospital beds, we keep talking about hospital beds, but it's about the professional staff that are there. It's the doctors and nurses, it's the respiratory therapists, it's the entire team in the intensive care units that do remarkable work, and they themselves have been responsible for what may be as high as a 50 to 60 percent reduction in case fatalities without any new magic bullets, no miracle drugs, no blockbusters. They've just really spent the time to understand how patients get sick in terms of what's going on inside their bodies and what needs to be done to try to counteract these changes. And what we've seen has been nothing short of a modern miracle, I think, in terms of the reduction of these severe illnesses and deaths. These people are highly trained. They are what we call intensive care providers. And so when they're short, when we don't have enough of them to match up with all the people who are being hospitalized, they still are getting care, the hospitalists, the doctors in the hospitals who work there are a remarkable group, they still provide incredible care, but they're not the intensive care docs. And so one of the things we're concerned about is a shortage of staff in the intensive care units. And we're concerned about the shortage of staff in the general hospital. And at this point, that's trifecta number one. The shortage trifecta of staffing. It's not going to be the beds, it's going to be the staffing. Number two, it's about protective equipment. Personal protective equipment is going to become increasingly short again. We do not have a major stockpile of respirators, N95 respirators, that will be there to protect health care workers in the numbers we need. Surely we've been able to stockpile some. The companies who make these respirators have done everything to increase their production, it's remarkable. 3M today announced that they're producing over two billion N95 respirators a year, up substantially from the previous production. And so that in a sense, this is a real challenge because it plays with that first trifecta. If we don't have a way to protect our health care workers, then it's going to be a real challenge keeping the numbers of health care workers on the job, doing their work, because they will go from being providers to being patients. And there's not a bigger hit on the system than watching that happen. So this is going to be a challenge. And as the surge of cases continues to increase, these shortages will expand. The third one, which is what you referred to in the question, is the shortage of drugs that we need to treat patients with covid. I'm not talking about the remdesivir or the plasma, any of those drugs. They at best have had marginal impact. Well, we're talking about are the critical drugs that doctors use to treat patients in the intensive care units, for example, intubation related drugs that have become the rate limiting factor for covid-19 care, because you can't use a ventilator if you don't have the drugs to intubate the patients with. A drug, for example, a sedative to calm patients when they're intubated. There is no substitutes for this one drug Propofol. And it's really a critical drug that we have to have that if we don't, this is going to be a challenge. And so what our work has been doing has been looking at drug shortages for the last several years. The Walton Family Foundation with Christy Walton has very generously supported our work to look at drug shortages well before covid-19 began. We identified one hundred and fifty six drugs that we need every day in our medical armamentarium, whether they're on the ambulance rig, in the emergency room, in the intensive care units, that if we don't have people die within hours. Of those hundred and fifty six drugs, all of them are generic and most were made outside the United States for which on any one given day, 60 or more may be in drug shortage status. So we were working on that part when covid came along. The report we just issued really goes into detail about what we need to do to try to correct this situation. What can we do to respond initially? But long term, how can we as a nation begin to address this? So we're not constantly at risk at any one day of not having that lifesaving critical drug. And it may only be a ten dollar drug. It's not like we're talking about the fact that it's millions and millions of dollars. So I urge people to go read this report. It's on our website. We will continue to work on this. As well as with the other two trifectas of staffing and PPE and now with this, and I worry that the confluence of these three with a surge in cases is going to be a real challenge. But we're here to work on it, deal with it, and as we've said multiple times on this podcast, failure is not an option.

**Chris Dall:** [00:22:55] So now onto the main theme of today's episode, what people can do over the coming months to stay safe and maintain their sanity. Mike, I know this is something you've been thinking a lot about and seeking input on. What advice do you have for our listeners?

**Michael Osterholm:** [00:23:10] Over the course of the pandemic, I've now done thirty one podcasts, this is my thirty second one. Thank you for coming back. You know, I don't want to put any importance to these in the sense that somehow I'm providing something that is otherwise not found. I'm just another person in this public health army trying to get us through. But if I have to talk about this particular podcast, I'd have to say this may be the most important one I've ever done. And it may be the most important one I'll ever do. And it's because it's about how we're going to get through. It's how do we look to the future and know that there is a bright light at the other end of the tunnel. This isn't going to be based on heavy science. You all well know I'm surely not a trained mental health expert, I've just lived life, I'm a dad, I'm a granddad, I'm a friend. I've had my ups and downs. You know, I come at this from just this is just my experience, so what I'd like to do is share with you how I see us trying to get through this. And I'm going to start this out with my number one point. We will get through this. We will. It's a matter of how you do it, and we have, to a certain degree, a lot of choice about that. This virus does not own us, it may control us sometimes in certain settings, but it doesn't own us, we own ourselves. So what can we do? Well, first of all, expect, number one, that the next six to eight months are going to be a challenge. They are. But we can get through this and it's not the rest of your life. And it's this covid year that we're in, we have to continue to remember that it won't be like last year. It's not going to be hopefully what's going to be like a year from now at all. But out of the sake of love for our families, for our friends, for our colleagues and even for our own selves, we just have to keep remembering we can get through this. It won't be forever. So when you get down and out, when you get discouraged, when you feel like it's never going to end, it is going to. Number two, it will not be easy. For those of you right now who are lonely because of what distancing you've done, my heart goes out to you. We're gonna find ways to bridge that loneliness. You know, loneliness existed long before the pandemic ever happened, but it surely has been accentuated with the pandemic. And I'll talk more about that in a moment. But I want to acknowledge that loneliness is a real part of this. I get lonely. Oh, my God I miss my grandkids. I wish I could see him more. I'm going to see him less this winter because it's harder to go outside and be with them like that. It's also not easy financially. There are many of you who are on this podcast who are suffering immeasurable pain because of financial uncertainties. And, you know, I don't know what to tell you other than that I wish Washington, D.C. could get it together to help out. What a difference that would make. And, you know, I do everything I can to try to encourage that. So it won't be easy. But again, it's our covid year. It's absolutely our covid year. The next thing that I have struggled with so much, and I'm sure I'm going to screw this up and I won't do it the way I wish I would, or at least with the sensitivity of the way you wish I would, I feel incredibly guilty talking to you about this topic when I have to distinguish between essential and non-essential workers. You know, I can sit here and tell nonessential workers, the white collar guys like me that don't have to go into the university. I can work out of my office. And I can bubble myself. And I can give all kinds of wonderful recommendations. When it's the essential workers who have to go to work every day or interacting with hundreds to thousands of people just to make the food systems work, to make delivery systems work, to make health care systems work, all these things like that. So I want it at the outset say that for essential workers, I'm going to give you my best shot. But I understand the sacrifice you're making and you are as brave as any soldiers that we could have right now in dealing with this army against this virus. And, you know, I did a podcast earlier this year on Essential Workers. Never enough, never enough. I just want you to understand. So as I go through these things, I know some of these are going to look and say, wait a minute, I can't do that. I have to go to work every day. I can't bubble like that. And I know that. And we need to do whatever we can to make sure you're right up in front of the line to get the vaccines. Next thing you have to do is be honest. Just be honest with family and friends. Sometimes in trying to avoid conflict, trying to avoid tough topics, we're not honest. We're not honest with ourselves. Be honest, because that is going to be such an important part of getting through this pandemic in terms of being able to say to someone, no, that's not true. This is what is the science behind that? Or this is why we have to do what we have to do. And, you know, we all want to get along. We don't want conflict. But there are times you have to stand up for what's right. And so be honest. And you know, I'm not talking about being cruel, I'm not talking about, you know, basically unnecessarily getting into an emotional slugfest. But if you're honest, it will carry the day. I know that. We have to acknowledge people for their sacrifices. People are sacrificing and acknowledge them. Tell them I'm sorry that you are going through this. How can I help? And then turn around and say, and you know how you can help me. So just acknowledge that these are going to be tough. And sometimes it's going to be people who you would want to promise the world to by saying, I'll come over and do this for you. I'll be there for that, knowing that you may very well put their life at risk. So it's really critical that we acknowledge people and say, I wish I could be there. I can't be, because if I came, this might be what would happen. You know, be firm in your conversations about issues related to this disease. But forgive. I have had far too many conversations with people, some who really don't like me at all, who are absolutely convinced that everything I'm saying is right out of the devil's mouth and that, you know, there's not any science that I can bring to the table that's going to change their point of view. I'm firm with them. But I have to forgive them and I say forgive not in the sense that I want them to go out and do things to potentially harm others, but otherwise it eats me up. You know, if you don't forgive, you're carrying that around inside of you. That's toxic. And I've had to learn that in my adult life. And for those of you who have tuned in to this podcast before, I want to tell you one of the things I did is I had to learn that through therapy. I you know, I've had a number of men who contacted me after I mentioned the first time, and that's one thing I hope you all here can learn is be firm, but forgive. Remember that every life has value. Everyone and we diminish ourselves. We diminish the life of others. And I think in many cases with this pandemic, we diminish. Oh, that's just an 87 year old grandmother in a nursing home, she died, you know what the hell that's what we expect, right? No. That's not acceptable. You know, we all are going to die. I'm going to die, and there will always be a top 10 causes of death. But we can respect life to the very last breath, and so I think that we have to bring to this every life has value. If you're black, brown or indigenous and you're working in these essential areas where thank God you're there or it wouldn't get done, your life has real value. We have to continue to remember that. And that's how we have to make some of our decisions is that piece. We all need essential contact. We have to have it. When I say essential contact, I'm talking about how do we interface, how do we get food? How do we get medical care and drugs? Food is critical. If you're uncomfortable, can't go to the grocery stores, don't feel comfortable going to the grocery store. If you can use online services, it can deliver. Now, I would say, of course, there is essential workers agai, order from your grocery store and pick it up in the parking lot. But get your food. In terms of medical care, don't let it drop. Medical care systems are trying to adapt to both providing covid care and providing safe non covid medical care. If you need medical care, if you need screening, if you have high blood pressure, if you're running out of drugs, if you have a pain in your chest that you don't know what it is, you know, seek your medical care provider immediately. If you don't have one consider urgent care that can refer you on to the appropriate health care provider. But don't let your long term health problems become crises because of this pandemic. And health care systems are trying hard to work to deal with that. For those who are younger who work, you know, if you're under sixty five and for some people like me are much older and still going to work, work is one of those essential contact areas. You can't avoid it. Now, for me, I'm lucky. I'm a white collar worker. I can work from home in my office. But for those of you that can't. Family is an essential contact. This is the tough one. You've got to negotiate this one. Again, if you can't bubble family and friends, then you shouldn't be with them. Which is my next point, bubbling. What we mean by that is, is that you can create a circle of individuals who are protected because they're not in contact with anyone else. And it's just you and them, or if there are two couples, each couple has bubbled to each other, but that's it, not anybody else. And then they connect with you now making a bubble of four, but they're not going outside that. You make a bubble of six, you make a bubble of eight, but you got to be absolutely certain everyone's bubble because all it takes is one leak in that bubble in all of the balloons deflate. The bubbles gone. So you've got to, again, be honest. This is where it's all about, honesty. Try to do that, reach out, find people who haven't really had much contact for the last seven to 10 days, 12 days. I say not much, meaning that they've not had high risk contact with other individuals. Say, would you like to go out for a walk with me or would you like to come over and sit here and let's just talk. And you can do that because they've bubbled. So try to find pods, set up pods to do that kind of work. Stay connected for fun, find fun things to do. You know, how do you play games of cards over the Internet with somebody you know, how do you play games? You know, what do you do to read books? What do you do to entertain yourself? Keep committed to having fun. Get your flu shot. Get your flu shot right now, if you haven't got it, get it. If you have to go to a pharmacy, get it. If you don't have access to that, see about how can somebody take you there knowing that you're going to have a vehicle situation potentially involved where your masked, but get your flu shot. Avoid socializing outside of your social bubble. I've already said that, but I can't say that enough. Get your bubble. Find out who you'd want to be in your bubble. You know, it's almost kind of like speed dating, which I like to be in my bubble. Do it. Make it fun. Avoid large gatherings, don't feel pressured to go to religious worships, weddings, funerals, sporting events. I know weddings and funerals in particular are very emotional, but, you know, you don't want to go to one of these and end up getting sick and seriously ill or you be the person to bring the virus into that setting. And three weeks later, grandpa and grandma or mom and dad are dead. I personally, personally have been involved with these kinds of situations, meaning I know about them, I've talked to family. The pain is immense. Don't do it, the pressure will be immense. Don't do it, feel strong, feel empowered, feel love. The ultimate love you can give someone is not to put them at risk. And the ultimate love that someone can have for you is to understand that. Use technology to stay connected if you can use Zoom, other platforms, help others navigate the connection world. You know, if you're one of these young, just really capable tech people, figure out how you can get Grandma, Grandpa or Uncle Bill or Aunt Jane wired in, OK, help them out. Avoid public transportation if possible. I won't get on an airplane. I know that the airline industry doesn't like to hear this. They've tried to, I think in some degrees, seriously minimize the risk of flying right now. If you fly and you've been in your bubble for the two weeks before, you just violated it. OK, so if you're going home and you've been in that bubble thinking I'm going to protect mom and dad, then I spend eight hours getting from point A to point B via plane, you just broke your bubble. Now, if I drive those eight hours, and the most I do is get out at the gas pump all by myself, I've not violated my bubble. I'm still intact. But if I'm on a plane, I haven't. Get tested and seek health care early if you develop symptoms, if you're feeling pressure on your chest like you got a 30 to 50 pound rock on it, if you're feeling, you know, that kind of just really have a hard time getting a breath. If you lose your sense of taste or smell, absolutely seek health care and get tested. If you test positive, isolate yourself according to the CDC recommendations and participate in contact tracing. Inform your contacts to the degree possible that they don't want to be out exposing others. Work remotely, if you can. We've talked about that already for the essential workers. I'm sorry, I can't be more helpful. But work remotely, we're starting to see an increased number of outbreaks right now in workplace settings where people are coming back x number of people to their cubicles and more than six feet apart, and they're still getting infected. Reduce the risk of having a serious illness with covid by exercising, maybe even losing weight. That will obviously make you feel better and at the same time, it will help you should you get infected. If you must go into public, wear a mask and try to keep a distance from others. Remember, a mask is just one layer. It is not going to protect you completely at all. It's one layer, that's it. Still do it, I recommend it, but don't count on it to be the be all end on. Find things that bring you joy, what brings you joy? What is it? Ask yourself that. Shut off the TV, stop reading the horrible news about how bad the world is. Find time to do things that bring you joy, is it reading books? Is it watching romantic movies and keeps TV on for that? Is it talking on the phone to family members? Just find joy, prepare yourself mentally for that long haul of the six months or more, prepare yourself now. If you do, you're going to get through it. It's the people who think it's going to end tomorrow and they get to tomorrow and they say, wait a minute where? And then it's the next day. I want to talk to you about the issue of limiting holiday gatherings. Don't do it, you know, and don't fall for some concoction that says, well, we'll all get together in the dining room, in the kitchen, in the living room, and we'll all stay 15 feet apart. And, oh, by the way, there's thirty two of us in that dining room, kitchen and living room. How are you going to do that? And the math doesn't work out here. OK, so don't fall for that. And yet so I'm not telling you not to have holiday get togethers, but with your bubble, establish your bubble now. Always love yourself and be kind. You know, when you get really depressed, you get really sad be kind yourself, be kind to others, be kind yourself. Be kind to somebody every day. Go out of your way to figure out how you're going to do it. And I don't want you to sleep well at night until you do it. OK, so even if you got to get up at nine o'clock that night before you go to bed, be kind to somebody. You know, the other thing is in terms of these issues, seek help if you need it, please don't be shy. Whether it's a friend, neighbor or a professional, don't hesitate to seek mental health support. You can do it actually online. There are a number of apps, we'll be putting those on the website so that you can go to those apps to actually seek help. So just do that. Seeing a counselor or a therapist is not a sign of weakness, it's a sign of strength. It's a sign that I recognize just as if I had a case of pneumonia or had an infection of my big toe or hard of hearing, didn't understand why? A therapist and anyone who can provide you that kind of support, please go see them. Frequently, E-mail, phone, text, videochat with family and friends. Get closer now to your kids than you've ever been. You may not be physically touching them, but get closer. Find ways to do that and know that you may need to take a brief break, if maybe even longer, from communicating with some family members. I've seen far too many families where the situation actually got hostile because of their different beliefs about covid and what it means. So don't hesitate to take a break. Don't beat yourself up by saying, well, I should have, you know, I talked to him all my life. This is your time to take care of yourself. I know this may seem harsh and in some cases unhelpful. But shouldn't we be fighting the good fights? And that's not a good fight to have. Don't do it. The other thing you can do if you have the means, donate, donate, donate, donate to food, shelter, homeless shelters, local organizations, anything that's struggling. Donate. Now is the time to share with each other what we have. Volunteer if you can. You can volunteer for organizations, for example, that require only a very limited amount of time. And all is done from home, you know, volunteer. Now is the time to do that. And you know, believe. Just believe we're going to get through it. We're going to get through it. Believe. You got to believe. We're here. We're going to stick this one through. We're going to be here for the duration. I need you to be here. OK, buck up and be here. We need you. And if you're feeling depressed, seasonal disorder is common this time of year, I get seasonal disorder, it's my Scandinavian genes. I think. You know, I have a light, I have a sad light that I use. And it's very helpful. If you're feeling seasonal affective disorder, get a light, you can order them online, they're amazingly effective, and if you don't have enough money to get one, let me know and we'll get you one. OK, I mean, seriously do that. Don't let that be a hindrance. And most of all. Last but not least. Listen to this podcast. You know, sometimes it's a little crazy, sometimes it's a little serious, sometimes it's spontaneous beyond your imagination. But at the same time, we're all together, we are, we're one big family trying to get through. And you know what? I put my foot in front of my other one every day, just like you do. Every day I keep saying to myself, I got to get through this one, but I know I can. I know I will. It's too important not to. I got kids and grandkids I love so much. I can't wait to get through this thing. I have a partner who is amazing. Amazing. I'll get through this. So as I conclude this, I hope these are helpful thoughts, I hope they give you permission to do what you need to do and what you want to do. Don't feel bullied into doing something you shouldn't or can't or won't about this pandemic. And you're the one that's going to be here next spring, getting those vaccinations, feeling a whole new sense of protection. That will be remarkable. And you're going to be around for that granddaughter's wedding a year from now and the next grandson's wedding six months after that, because you're still around. You didn't get infected, you didn't get seriously ill and you didn't die. That's what we have to keep remembering. That's the long view. And so thank you for humoring me during this time, but it's my best shot. And as I've already said before, I'm not an expert in this area. I don't pretend to be. As you all know, I jokingly say, you know, my daughter's the neonatologist. She's the real doctor in the family. I just play one on TV. Well, I just did that just now, OK? I kind of played one on TV, but I hope it's helpful.

**Chris Dall:** [00:46:31] For the last few weeks on the podcast, you've been reading emails from listeners about friends and loved ones they've lost to covid-19. We're calling these celebrations of life. Mike who are we hearing from this week.

**Michael Osterholm:** [00:46:43] This was one sent to us by Laurie C. and Laurie, thank you. It was a beautiful remembrance of someone. Let me begin, Laurie wrote, "I just wanted to share that my friend Lola died, have covered this past summer in Beaumont, Texas. Lola was a hardworking woman, was a legal immigrant from Mexico. She and her husband made and sold tamales and burritos to regular customers who worked in factories and warehouses on the outskirts of Beaumont. To earn a living, she would get up before dawn to prepare the food that was she would sell that day. After the food was prepared and the kitchen was clean, she would spend hours driving to the different workplaces in order to sell the lunches. Lola drove to deliver the food each day because her husband was a Vietnam War veteran who was legally blind. Sometime during the end of June, Lola contracted covid-19. She was in an ICU unit on a respirator for twenty seven days before she died. I was able to watch her memorial service on Zoom. The pastor used to sentence to describe her life, always participating, always joyful. That sums up who Lola was. I'm blessed to have known her. Her husband also contracted covid-19 and has gone to Louisiana to live with his daughter. Their humble home will probably go back to the bank. Thanks for letting me share this, Laurie C. Laurie, thank you. I'm sorry for your loss, Lola. Sounds like a remarkable woman and thank you for sharing these very, very kind words with all of us and allowing us to know a little bit about Lola too.

**Chris Dall:** [00:48:30] And a reminder to our listeners that if you'd like to share a celebration of life with The Ostrum Update about a loved one, a relative or a friend, you can email us at OsterholmUpdate@umn.edu. Mike, I understand you have canine related closing thoughts today.

**Michael Osterholm:** [00:48:47] Well, we seem to have had an animal theme recently. Mama Kitty still remains very important and Mama Kitty is doing very well. Thank you, I'll have you know that. This one came from Lonnie from Montreal, Canada, and it's something she had read and sent to me and then added her own additional comments in a second part. So let me read the first part. It's the subject of why dogs live less than humans. For all the dog lovers, get ready. Here's the surprising answer of a six year old child. Being a veterinarian, I'd been called to examine a 10 year old Irish wolfhound named Belker, the dog's owners, Ron and his wife Lisa, and their little boy, Shane, we're all attached to Belker. And they were hoping for a miracle. I examined Belker and found he was dying of cancer. I told the family we wouldn't do anything for Belker and offered to perform the euthanasia procedure for the old dog in their home. As we made arrangements, Ron and Lisa told me they thought it would be good for a six year old Shane to observe the procedure. They felt as though Shane might learn something from this experience. The next day, I felt the familiar catch in my throat as Belker's family surrounded him. Shane seemed so calm petting the old dog for the last time that I wondered if he understood what was going on. Within a few minutes, Belker slipped peacefully away. The little boy seemed to accept Belker's transition without any difficulty or confusion. We sat together for a while after Belker's death, wondering aloud about the sad fact the dog's lives were shorter than human lives. Shane, who had been listening, quietly, piped up. "I know why!". Startled, we all turned to him. What came out of his mouth next stunned me. I never heard a more comforting explanation. It has changed the way I try to live. He said, "People are born so that they can learn how to live a good life, like loving everybody all the time and being nice, right?". The six year old continued, "Well, dogs already know how to do that, so they don't have to stay around as long as we do". She went on to add in her commentary, "Live simply love generously, care deeply, speak kindly". And then she added, "Remember, if a dog was the teacher, you would learn things like when your loved ones come home, always run to greet him. Never pass up the opportunity to go for a joyride. Allow the experience of fresh air and the wind in your face to be pure ecstasy. Take naps, stretch before rising, run, romp and play daily, thrive on attention, let people touch you. Avoid biting when a simple growl will do. On warm days, stop to lie on your back, on the grass, on hot days, drink lots of water and lie under a shady tree. When you're happy, dance around and wag your entire body. Delight in the simple joy of a long walk. Be faithful. Never pretend to be something you're not. If what you want lies buried, dig until you find it. When someone's having a bad day, be silent, sit close by and nuzzle them gently. That's the secret of happiness that we can learn from a good dog". Thank you so very, very much, Lonnie, for sharing that with us, and thank you, all of you, for being part of this podcast. I hope what I've shared with you makes some sense and is helpful. As always, please never forget our pandemic of kindness. It's what we're about, it's what's going to get us through.

**Chris Dall:** [00:52:37] 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, Corey Anderson and Angela Oelrich.