

**New York State Disaster Preparedness Commission | Semiannual Meeting  
Albany, NY | December 14, 2021**

Jackie Bray: As the new acting Commissioner at the Division of Homeland Security and Emergency Services I am also happy to welcome all of you back to in person meetings with each other. Certainly that is a hard fought milestone for us. We're gonna do roll call. You'll lead us in the Pledge of Allegiance Colonel Underhill and then we'll get started. Okay, I'm told I have to take roll call. It's officially a part of the duties, right? Let's see. Oasis who do we have? Okay. Office of the Aging? Alright. Agriculture and Markets?

Male: Here.

Jackie Bray: I think they put you in alphabetical order by agency. I see why they did that now. American Red Cross?

Male: Here.

Jackie Bray: I saw you. OCF?

Male: Present.

Jackie Bray: Alright. Commissioner Nuchi I see you there. Thank you for coming sir. DCJF?

Male: Here.

Jackie Bray: Great. Education Department? Thank you. Empire State Development? Alright. Oh, we're on the back page too. President Harris you are here. Thank you so much for coming. Good morning. DEC? Alright. Let's see I've got Allison? Okay. This is the whole thing, alright. DFS? Commissioner. Mosher I'm not sure. You are hey nice to see you. Thank you so much for coming. I see \_\_\_\_\_ table there too. DOH?

Male: Here.

Jackie Bray: Alright. Not gonna roll call myself as a general rule. Colonel Underhill are you here?

Colonel Underhill: I'm here.

Jackie Bray: Alright I'm glad, I'm very glad you're here. ITS?

Male: Present.

Jackie Bray: Commissioner Reardon?

Commissioner Reardon: Present.

Jackie Bray: Thank you. OMH?

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Male: Present.

Jackie Bray: MTA?

Male: Present.

Jackie Bray: Now I got CMNA. Parks?

Male: Present.

Jackie Bray? OPWDD?

Male: Present.

Jackie Bray: Okay. Port Authority? I saw Jerry.

Jerry: Present.

Jackie Bray: Did I miss anyone? Who did I miss? Okay hold on. Public Service Commission?

Male: Here.

Jackie Bray: Okay. DPS do I see? Oh, sorry, sorry about that. Secretary Hughes? Thruway?

Male: Yes.

Jackie Bray: Commissioner it's nice to see you again.

Commissioner Domingos: Nice to see you.

Jackie Bray: Commissioner Domingo is here. And Director Cronin? No. Do we have Victim Services? Okay that's okay. We have a quorum, we for sure have a quorum. Colonel?

Colonel Underhill: Ma'am. Let's do the Pledge of Allegiance. Please stand. Please recite with me: I pledge allegiance to the flag of the United States of America and to the Republic for which it stands one nation under God indivisible with liberty and justice for all. Thank you.

Jackie Bray: Thank you. Before we get started I wanted to introduce myself because I'm new and frankly so many of us are new. And I wanted to make sure that you all had a sense of what my priorities are but also how I view the division and how I view our work together. So let me just say this, I have come to see this division as the people that need to have your

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back. That fundamentally what the Division of Homeland Security and Emergency Services is about is having your back in as many ways as we can. Sometimes that's going to mean that we're handing you resources. Sometimes it's going to mean that we're passing you information, you're passing it back and we're distributing it. Sometimes it's going to mean that we have to block and tackle for all of you. I am exceedingly good at blocking and tackling. Sometimes it's going to mean that I need to be your cheerleader. I'm an even better cheerleader. Sometimes it's going to mean that we need to push you to hit your mark but that my job is to have your back and the way that I can do that the best is to know what you need. So, my first act to all of you to help me be successful is to don't be shy tell us what you need from us.

The second thing I want you to know about me is that you're going to hear me talk a lot not only about the operations and logistics in a disaster response and preparedness context but you're going to hear me talk a lot about communications, understanding human behavior in a way that we can appropriately communicate risk and uncertainty to help people take action. We get very good at knowing how to respond. As a community we are often less good at knowing how to communicate that in a way that helps individuals take the action they need to take. I think if the pandemic has taught us anything it's that we really have to up our game there. But that is about all hazards. It's not only about the context of the pandemic.

The other thing I think is important for you to know about me is that I love government. I love public service. I always say that I'm a public sector evangelist. But while I believe deeply in the power of government to do good, I also know that the fact that trust in government has been undermined makes responding to any hazard harder and it puts us all at greater risk. And I believe that as leaders in government me and all of you it is incumbent on us to help build that trust, to rebuild that trust, to understand that that trust was undermined purposely and deliberately often and to push back against the idea that government can't be good, doesn't do good. Government does do good, must do good, should do good and has continually delivered for people but it is incumbent upon all of us to not only do our jobs but to continually make the point and to continually rebuild that trust.

I have a background at the National Weather Service. I am a weather expert. I have a background at New York City's Department of Homeless Services. I'm a transitional housing expert and I have been really honored over the last twenty months to help the city run its pandemic response. So there is a lot, a lot for me to learn but that's just a little bit about where I'm coming from that I wanted all of you to know.

With that let's start the agenda. We are first going to hear from the National Weather Service. Good morning. And I will tell you we should all use the mike and be loud because obviously the masks are absolutely critical but you know can be hard to hear through.

Steve Darienzo: So, can you hear me? Okay good. I'm Steve Darienzo. I'm with the National Weather Service here in Albany, New York. Just a little bit about the Weather Service before we start. Not everybody's familiar with us. We're a federal partner like FEMA. We're part of NOAA and the Department of Commerce and we work with other

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federal agencies like the U.S. Geological Survey and FEMA. There are five weather service offices that cover New York State.

So, I'm going to talk about first the winter weather hazards refresher. New York gets a lot of winter weather in an average year. We'll talk about the winter weather outlook for the remainder of this winter and the last slide just has the National Weather Service contacts for each of the offices. Okay so, we'll start, you know obviously the winter weather hazards take a lot of shapes. We get weather severe weather hazards all year long here. Flooding is possible all year long. But the particular winter hazards the snow and the freezing rain, the high winds like you saw this last weekend and then the ice jam flooding obviously is a or ice jams in general ice is a wintertime phenomenon. So the impacts of snow at the base level it's a transportation problem. It's the biggest problem probably transportation issues. When you get high snowfall rates you have additional problems it's harder to see, to drive, to plow. We've had, you know in the history we've had early and late season snows as early as October in the valley areas that have affected like the city of Albany. As late as May we've had problems again the same kind of condition snow with leaves on the trees can be a problem. Any time you have wet snow and a lot of wind that's not good. Again, that produces power outages. We can get snow squalls periodically. We've issued warnings for those now. And then the blowing and drifting snow and periods of prolonged accumulation. We don't see the prolonged accumulation more than a couple of times a decade but it's when we get the long periods that the snow tends to build up and becomes a weight issue on rooftops.

One of the big problems New York sees a lot of because we have two of the Great Lakes is lake effect snow. They're kind of their own thing. We get the narrow bands off the lake and that's really wind dependent. It can affect, you know, west wind it affects Watertown, the south towns of Buffalo. If you get more of a northwest wind it becomes Syracuse and Rochester's problem and then a southwest wind the city of Buffalo tends to see the biggest impact. So, again the lake effect snow is localized usually pretty close to the lake and the rest of the state can be dry while the lake effect is going on and producing tremendous amounts of snow. Next slide.

So, for those who are wondering about last year and how did we do last winter? It was mild in November and December so the lake effect season got started kind of late so the areas near the lakes had below normal snowfall but for the Southern Tier, Catskills, Lower Hudson Valley, New York City area snowfall was actually above normal last winter. There were a number of storms in January and February and much higher than average snowfall more downstate as opposed to upstate.

Freezing rain is something we don't see all the time. Usually New York State gets a lot of hours of freezing rain – twenty-five to thirty hours per winter but it's usually at five or six hours at a time so you don't get enough ice accumulating on the trees to bring down tree branches and power lines. It's when you get one storm that produces twenty-five hours in a row of freezing rain that we usually see our problems. Now last widespread ice storm was in 2008. Usually about once a decade so we're kind of overdue for one of these. Let's hope not

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this year but yeah, if you go back in history it's about once a decade there's a pretty large ice storm somewhere in New York State.

Wind hazards the problem with the winter storms is they tend to be very large. We had a big windstorm this past weekend. They can cover entire regions across the country with strong winds. Summer thunderstorms are more isolated in nature usually but the winter windstorms can be quite large. And you know as we saw on Saturday this past weekend, you know, a good part of the state had fifty, sixty, seventy mile an hour winds and quite a bit of tree damage. Again, power outage becomes the impact, the problem.

The winter hazards the ice jams and ice jam flooding, mostly the northern part of the state generally from I-90 north. Further south occasionally a few times a decade we see ice jams further south into the Catskills and even further south. It takes a lot of cold weather. You have to build up the ice and then it has to break up quickly and jam up. So, when you get up towards the Adirondacks the far North Country the state almost every winter and there is some ice jam issues. Outside of those areas it's less frequent.

And then finally the extreme cold. There's two types – we break this into two categories, the persistent cold which is when you have multiple days of significant cold weather quite a bit sort of two or more standard deviations below normal but it lasts for like three or more days. And that's when we start to see problems with design standards of infrastructure. We see water mains freezing, pipes freeze in houses and schools things like that. And then the other type of the extreme cold is the wind chill – that's when you put the wind and the cold together and wind with the cold removes heat from your body quicker and you can freeze flesh much faster. And so we worry about wind chill and we do issue wind chill advisories and warnings. We also do briefings for the persistent cold outbreaks when we see them usually once a winter we see that. I think the worst the most we see it is about three times a winter we'll see the persistent cold in a really cold winter but again the first type is the you know problems with design standard, the second type is more of a human body problem.

So, any questions on winter weather and hazards across New York State? Okay just, we'll go onto the winter weather outlook then.

Jackie Bray: Steve let me just offer a couple of things if that's okay?

Steve Darienzo: Sure.

Jackie Bray: I do know that we're gonna do over at the Office of Emergency Management a brief for me on ice jams. If there are any Commissioners that are new or if you guys have new senior leadership who also want a brief on ice jams, let us know and we'd be happy to include you in my in me getting up to speed there. And I think you're going to take us now through sort of what we expect seasonally this winter, is that right?

Steve Darienzo: Yes.

Jackie Bray: Great.

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Steve Darienzo: Okay so, the El Nino and La Nina the end so phase has kind of a big determination especially when they're really strong one way or another in our winter weather. So the El Nino is the warm phase, La Nina is the cold phase. This year we have a La Nina right now it's sort of moderate. It's supposed to weaken during the winter. La Nina winters tend to have a sharp gradient in precipitation and snowfall. Last year we saw that the demarcation like was sort of the Mason/Dixon Line. North of that there was quite a bit of snow across Pennsylvania that you know the lower half of New York. You never know where that line's going to set up but it can set up anywhere from Montreal to you know to Washington, D.C. but that's typical for La Nina. Next slide.

The cold phase the air that the Pacific Ocean that we're concerned with is out in the middle of the where that red box is. You can see the blue conditions indicate the cold phase, the colder than normal water. Next slide.

So the forecast, the probabilistic forecast and the model forecast show the La Nina weakening as the year goes on. So, we're not expecting it to strengthen. Right now it's sort of moderate. It's supposed to be weaker with time as the winter goes on and that's not unusual. Usually they do weaken as the winter goes on and because of that, winter tends to get colder and snowier in La Nina years as we progress further into the winter. Next slide.

So, the official outlook for the first three months, December, January, February generally above normal higher than normal probabilities for above normal conditions. We're seeing a pretty mild December. Normally November is also mild in La Nina years. However, November was below normal this past year just this past November. So we're seeing the mild December conditions but oftentimes somewhere between the 10<sup>th</sup> and 20<sup>th</sup> of December it's like a light switch there's a change in La Nina years and then it just becomes snowy and lasts until March and that happened last year. We had a big snowstorm the 16<sup>th</sup> and 17<sup>th</sup> of December and then after that there was pretty much snow on the ground into March across most of the state. So, you know that's, that's typical for La Nina. We tend to get a cooling trend with time start warm early and get colder and snowier as it goes on. Next slide.

And that shows up in the forecast although they're still showing higher than normal chances for above normal temperatures. It doesn't have to be even if it's slightly above normal it's still cold enough to make snow for most of the state. So, again a slight cooling trend as the season goes on. Next slide.

One thing they are showing is a higher than normal precipitation for December, January and February across most of the northern and western part of the state. This is kind of not a typical La Nina forecast but that's what the Climate Prediction Center has. Usually it starts dryer which we've seen so far this year. I mean there's been some occasional rain but usually November through January is fairly dry and it gets wetter as the winter goes on. So they kind of have that flip this year which is kind of unusual for La Nina and if you go to the next slide you'll see that. They show basically equal chances for precipitation. And again, typically La Nina gets wetter as the winter goes on. Usually see more precipitation second half of the

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winter January through March then you do in November and December but that's the official forecast.

So, then in summary December through February becoming colder and near normal precipitation east slightly wetter west and then Springtime closer to normal temperatures and precipitation. And so, again, La Nina's typically get colder and snowier as we go on. We saw that last year and I don't expect a whole lot of differences this year. So, any additional questions? Alright hearing none.

Jackie Bray: Thank you. We have the Department of Transportation. Good morning.

Woman speaking: DID NOT USE MIKE. CANNOT HEAR HER.

Colonel Underhill: Okay thanks Commissioner thanks for that introduction. I want to thank Commissioner Bray and the rest of the Disaster Prepared Commissioners for the opportunity for us to present at DOT how we conduct our readiness and then ultimately the execution of a response to any event that occurs during the winter. Next slide please?

First some context. At state DOT we have one of the largest and most sophisticated snow and ice fighting operations and particularly fleet anywhere not only in the state but in the country. You can see there we are responsible for over thirty-seven thousand lane miles. For context, when we execute one beat that's one rotation of a truck on all these lane miles if we did this at once that would be one and a half times around the equator and we do this multiple times for each event. So envision a twelve hour to eighteen hour event how many times around the equator this fleet moves. We also have a great partnership as the Commissioner said with a lot of local municipalities. We have one hundred fifty-one municipal contracts that we pay forty-three million dollars a year for, for the municipalities also to plow to respond to, to clear state routes within those municipalities. Next slide.

Staffing – to operate this fleet and respond to an event we've got over thirty-five hundred operators and supervisors at least on the books. This year we have had significant hiring challenges. A lot of this due to COVID. The hiring freeze as the state responded, got through COVID, unfortunately, it's still going on but you know moved through what at the time was the worst of it. Also, a very competitive hiring labor market out there. These are CDLB Operators primarily and if you've seen anywhere in the country everyone is desperate for CDLB Operators. So, to combat that we've really aggressively recruited. You've seen for the first time I think many of you probably billboards out of many of the facilities advertising "Come plow with us. Join the DOT Team. Again, we are the best snow fighting force in the country. We want you to be part of that". We've also realized the need through many years to be flexible and efficient with the use of our resources. We've become very adept at really anticipating what the storm in particular is going to need as far as response and moving personnel and equipment around the state. We call them out of region employments. This has become really SOP for us. We've prepositioned additional assets and what we anticipate to be the harder hit area. That's some of the contingency plan that we have underway now looking at the workforce we have in place. We're still about three hundred operators short but we continue to onboard new people every single day. We also plan on rolling assists where

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we'll extend beats, roll into adjacent regions again moving equipment and personnel around the state so we are adequately prepared to and engage in the storm to keep the folks out there on the roads safe. We also are enlisting volunteer operators. These are folks that may have plowed for us in the past and now moved onto other jobs within New York State DOT to come back and backfill in place and get out there in those plows when needed. Next slide please.

We'd like to say at DOT it's always snow and ice season. We continuously prep for and respond to storms year round. Coming out of a winter we go through a full inspection of our fleet. We conduct after action reviews not only internally but with our partners to learn what didn't work, what worked and refine our SOP's accordingly. We work with OGS to ensure that we've got a salt supply, the contracts are in place. I can assure you this year we have plenty of salt. We typically keep enough salt on hand for five events and right now we are fully supplied and our folks are actively using so we are already coordinating for resupply.

In October that's when we really start to ramp up. We go into a snow and ice mode in case there are early storms. By November all of our trucks statewide are fully equipped with plows, with any kind of slide and salt spreaders and the spinners are calibrated and by the end of November we're fully engaged in 24/7 ops. We run two 12 hour shifts that allows us to have that 24 hour coverage in everywhere in the state except for Long Island. Long Island's a little bit special just due to the nature of storms that typically occur there and the number of personnel we have in place. Next slide please.

We have a winter ops app that we use internally for situational awareness. This allows our storm manager to have all information at the tip of their fingers on their iPad, on the computer to make smart decisions. We conducted two staging area exercises this year. We conduct these to ensure again that our team is ready to move assets around the state and that receiving region is ready to effectively get them onboard quickly and get them deployed to the field. We conducted one in Poughkeepsie and one up in Clinton County in Plattsburgh. As the Commissioner said earlier, we have an excellent relationship with two of our response partners I'll call out now – DEC and Parks. Their Sawyer crews are employed that allows our folks to focus on any kind of clearing of snow, ice. The Sawyer Crews augment our forces to allow for additional assistance for clearing down trees when we have a large wind event like we had this past weekend. Commissioner Brady you mentioned ice jam? We have been engaged in ice jam monitoring response for a number of years now. We have already engaged this year with your folks at DHSES and the planning for any ice jams that may come up. Long reach excavators will be acquiring and staging around the state as well as conducting routine patrols and reporting on the conditions of what are debris prone and ice jam prone waterways.

Lastly and you know my friend Kevin Wisely is here. We've got a great relationship with the utilities. We make it a point to proactively reach out to local utility managers before an event to make sure we still have a good point of contact. We establish communications. So, again, if we have any kind of interruption involving utilities our crews can work directly with their crews to clear and reestablish quickly. Next slide please.

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COVID contingency planning – COVID is still a threat. We at state DOT last year had a statistically very low infection rate and impact and a lot of that was because of the cleanliness standards, the social distancing standards that we employed and enforced very closely statewide. We're going to continue that. We also worked with our municipalities on some of that education. We at you know before last winter and then at the end of last winter conducted an after action review where we invited all the municipalities in to go through again what worked and what didn't so we could make changes for this year. One thing that could be an issue I want to call out here is our ability to immediately assist OFF System because of the COVID constraints, because of our resource constraints. This year we're going to have to work very closely with DHSES to prioritize any New York response request to make sure that all assets are being looked at both at the local level and at our level so we can plan responses as officially and effectively as possible to take into account some of the concerns relative to both COVID and resources. Next slide.

Our fleet right now is, you know, if you don't have the horses you can't respond. We're at 100% readiness. Our storm managers and our fleet managers work very closely to get everything up over the warmer months. Everything is completely online at this point and we've also worked with our vendors both suppliers and service to prioritize our equipment at the same level the first response vehicles are prioritized. So, when we've got something that goes down that's beyond our fleet managers capability and our mechanics capability vendors understand it's a priority to get these vehicles back on the road as quickly as possible. We also have worked to stockpile any kind of critical spare parts to mitigate any supply chain concerns. Next slide.

Because of the shortages of mechanics much like operators we are you know in competition for mechanics not only in the state but nationally. We have made it a practice to move our mechanics around the state to make sure that we are dealing with any kind of backlog on any repairs and during an event we always deploy a mechanic package along with the operators and equipment that we send you know maybe from Western New York downstate if it's a downstate event with the vehicles and equipment. We also send the mechanics to make sure we've got adequate folks on hand technical support to make sure that these things continue with that 100% up time. Next slide.

This is a typical daily report that we produce in the morning around 4 AM. Looking at all of our systems to again take a look at all of our equipment and make sure it's up, it's ready. This is shared with the Office of Emergency Management every morning as well through a watch center process and this is something that's shared across the board all managers involved in storm response in New York State DOT has this same dashboard so you can understand where the threats are and where we need to mitigate. Next slide.

Planning preparedness as Commissioner said that's key to everything. A successful plan leads to a successful operation. We work very closely with DHSES on our EMOP updates annually. Internally we've got an emergency transportation operations playbook that we call it. That's our SOP for an all hazards approach. Everything we do we make sure is scalable – everything from a tire change on the side of the road to a full response when we've got a statewide weather event underway. Our coup has been exercised continuously throughout

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COVID to make sure that we continue to deliver the services that we are demanded by the taxpayers in New York State. The Pandemic Plan has also been refined. As I mentioned earlier, we continually conduct drills and exercises. The two relative here are the deployment exercises and then, of course, training. We're a fully NIMS and ICS compliant shop so that training as we onboard new personnel we make it a mention in every posting at New York State DOT for a manager that you're expected to support emergency transportation operations. And with that the training is mandated that they also have to take that training when they move into a management position. Next slide please?

Pre-event planning timeline. I'm not going to go through each of these bullets but this is really the illustration for us that underlines 72 hours out is when we start our detailed planning. That's when we have what is we determine to be a reasonable, reasonable, reliable forecast from the National Weather Service or our partners as MENSENET. That's when we get into looking at okay what assets do we need where? Who is short? Who's got extras? What do we need to move around? We start the outreach to our partner agencies and again the details start to flow. Next slide.

Situational awareness that is key for leaders to make good decisions. Routine operations we internally we have a statewide information center that monitors all of the incidents that may be occurring on any of our highways. They're elevated both internally through management but also externally as an example to the watch center. Weather, we work very closely with our weather partners uh, MENSENET folks as well as the National Weather Service. During activations and many have seen this, we start actively reporting condition information on our facilities as well as what our response details every two hours. That's been our standards for almost ten years now and we think it's a, you know it paints a good picture for the decision makers. We also, of course, are responsive to any custom inquiries if additional information is needed. Some of the key systems we monitor through ESF1 as Commissioner mentioned – New York Response – that is the system that gives that common operating picture for any kind of request that we may be called onto to honor as well as our other agencies are part of the SF1, the SF7 or any of the other support functions. We also have what we call the CLARA System internally. We've got over twenty-two hundred traffic cameras now on our system where we can monitor in real time what's going on out there on our roadways. Next slide.

The key to any successful partnership is always good communication and nothing has suffered from too much communication. We've got an excellent relationship with state DOT with all the entities here and I'll just call a couple out. Our partners at MENSENET and Weather Service their role here you know it can't be underlined enough. That's what helps us with our planning. Our Thruway partners, Bridge Authority, our folks you know Kevin Wisely again over at the PFC and DPS working together to not only plan but to respond quickly is key to our collective success. We also have great partnerships with all of our border states. Every fall we have a planning exercise and a call typically these days, unfortunately, with all of our border states to work through joint SOPS especially when it comes to any kind of truck restrictions or closures on the highway to make sure that our messaging is tight, that we've got good communication channels and we can digest that information and inform all of our respective decision makers in a uniform way. We also work

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with what's called TRANSCOM and NYTEC. TRANSCOM is the Metro-New York City area, NYTEC out in Western New York. These are operating coalitions. TRANSCOM has got sixteen member agencies, first responders, State Police. Again, sharing that common operating picture for planning purposes. NYTEC is the same they're a little different and then that's also cross the border where we work through them to work with our Canadian Partners again on restrictions of messaging around the event. Next slide.

Traffic management strategies that we consider. This is all event dependent, of course, and again all scalable. Depending on what the impact is, the intensity, what's going on out there with the weather and how it's impacting the roadway and other transportation systems. One thing to mention is we always try to avoid a closure. Closure of a road is something that we try to do everything we can to mitigate especially when it comes to trucks. We want the trucks to stay on the facilities like the Interstate. It is built for them, therefore, we have either you know either adequate by planning or put additional assets on a route to make sure those routes stay open. If we have a storm intensity that's just so intense where it's whiteout, it is unsafe, that's when we'll start to move institute either a soft closure or a hard closure. Soft closure is this road is closed. It's really just done through messaging either through the press, through other public outlets or for our BMS Boards. Hard closures are done in a very limited way. Typically what we saw in this past wind event on the skyway we have gates out there or in some a couple of locations down in the lower Hudson Valley like I-84 we've got a couple of gated locations there. In general, you know, these facilities are our best facilities and we really strive to keep them open in as much condition as possible. We don't want the trucks moving off onto the local system where they get stuck, they cause other problems. So just mentioning that, that's part of our plan. We also do a lot through messaging. You'll see in advancement of event we have very tailored messaging to give the traveling public as much information in advance so they can make smart decisions about their travel or not to travel. And this is always done jointly with our partners, the State Police, the Thruway, other transportation agencies and elevated up to the Chamber as part of the planning process. Next slide and final slide.

Traveler information – we again want to get as much good information out to the traveling public in a timely way so they can digest it in the way that they want to receive that they're comfortable with whether it be through 501 New York or Google or ways or what have you. We want them again to make a safe decision before they leave their home, before they leave work and understand what the conditions are out there on the road. Statewide we've got over twelve-hundred VMS Boards now where we can do active messaging. All of those are controlled remotely through our transportation manager centers – we have ten. We also work with the Thruway and the other transportation agencies downstate through the joint traffic management center on this messaging. Cameras as I mentioned earlier are over twenty-two hundred now. Again, these are all available to everyone here in this room as well as the traveling public through 511 New York. Social Media, of course, a huge tool but also our PIO's have developed specific outreach strategies to make sure we are engaging as many agencies and outlets as possible so we can have that multiplier to get that message out rapidly. And final slide.

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Ultimately, DOT delivers. We have a very, seasoned, experienced storm management team at DOT as well as partners with all of these agencies in this room but in particular those that are part and parcel to snow and ice response. So, again I want to thank everybody for the opportunity to speak today. I'll turn it back over to the Commissioner in case she wants to add any closing remarks. Commissioner?

Commissioner: NOT MIKED – CANNOT HEAR ANYTHING SHE IS SAYING.

Jackie Bray: Thank you. Any questions for DOT on snow and ice preparedness? Okay I was remiss earlier not to introduce Christian Jackstadt who has joined us as the, who is the Deputy Director of State Operations and is here today. So, thank you for being here and Superintendent Bruin joined us. Want to say thanks for coming. We will move onto, where are we going next? We're going to the State Office of Emergency Management which is a team inside our division of Homeland Security and Emergency Services. The state engaged in an Ida after action and these are two of the items that were critical to address in that after action. Matt Franklin.

Matt Franklin: Good morning everyone. Can you hear me okay? Perfect. As Commissioner Brace said my name is Matt Franklin and I'm the Director of the New York State Office of Emergency Management. Today I would like to take a few minutes to talk with you about AFC reporting during events and Emergency Management Operations Protocol or EMOP notification updates. Next slide please.

The effects of Hurricane Ida resulted in historic flooding, caused multiple deaths, displaced residents and caused hundreds of millions of dollars in damages to homes and public infrastructure. A thorough after acts report was conducted for this event and the Division of Homeland Security and Emergency Services or DHSES was tasked with development of little to no notice weather emergency procedures and the development of new situation reporting process for executive stakeholders. Next slide please.

Regarding developing little to no notice weather emergency procedures we have continual conversations on how best to have agencies report information into DHSES during events. Reporting is designed to capture what each agency is doing relative to the event and the report that we request is used to provide a summary of events to the New York State Emergency Operations Center or the EOC to state agencies and their leadership and to the executives within state government. Reporting is intended to keep leadership apprised of what each agency is doing in relation to the event. Regarding development of new situation reporting process for executive stakeholders, reporting incidents into DHSES is required by agency EMOP. More specifically the EMOP requires notifications that incidents into the state watch center. We need tangible identifiable benchmarks or triggers for reporting. Next slide please.

Agency reporting is used to create a leadership intelligence report or LIR. The LIR is used to inform and update leadership for the events that are occurring. Next slide please.

For expected or planned events reporting may begin twenty-four or forty-eight hours prior to the event. For no notice events reporting begins at the onset of the event. These reports

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should be sent into DHSES either directly to the watch or to the EOC planning email address and a specific reporting location will be given at the onset of each event. Next slide please. Some important points to know when reporting. Provide a concise summary. The shorter the better for anything you are sending in. Present that information in bullet formats. Those are much easier to read when they come in and they make it much easier for us to prepare the LIR when things are in bullet format. Include tables and charts as warranted. Sometimes those charts speak for themselves and provide the information we're looking for and a Word Document is required. That makes it easier for our staff to cut and paste. If it comes in a PDF or some other format or Excel it's very difficult to cut and paste those things to form one document. What to avoid? Do not assume the reader will understand agency acronyms or lingo. You need to be specific. Different agencies use similar acronyms with different meanings and to avoid any confusion completely define your acronyms. Do not report unverified information and only report those things you need to be factually correct. Do not comment on those things that you or your staff may have heard conjecturally or notionally. We need to know exactly what's going on and not what staff may have heard, what they thought they overheard or what they've seen on TV. Just stick to the facts for that. Do not report anything that is outside the agency's purview. Only report those things that are within your agency's operation, mission or jurisdiction. We don't want one agency reporting on what they may know or may think they know on another agency if that agency is reporting something different. We need to make sure their message stays consistent. And do not include the weather. Oh, yeah we'll include the latest weather information – there are multiple weather services available and different agencies may use different services to supply the weather information. But for consistency purposes DHSES uses the National Weather Services to provide it's weather updates. We will supply you with specific formatting guidelines and provide additional information how we would like information sent to us after this meeting. Next slide please.

Regarding agency reporting updates for EMOPs. The EMOP applies to any emergency that rises to the level of concern for DHSES that activate, mobilize and manage personnel and resources in response to an event that warrants a multi-agency response. Next slide please.

Your EMOP outlines your agencies requirements to report events to DHSES. To improve the information that is being reported to DHSES we are asking each agency to identify and provide a list of those events and the triggers their agency will be reporting to DHSES. Next slide please.

EMOP reporting is broken down into two types. First is agency continuity disruptions, those things that impact your agency day to day operations. For example: A facility issue that requires employee relocation – a flood, loss of power, you lose internet and I'll give you a specific and personal example. Say for example a sprinkler head breaks over your emergency manager's desk, floods his desk and the entire floor and then forces the relocation of his entire staff and part of the staff in the floor below him. Those are things we'd like you to communicate to DHSES so we know where your staff is in the event that an emergency or other situation arises we'll be able to make sure we maintain contact with that staff. Another example is if a suspicious package is delivered to your facility that requires a response those sometimes a suspicious package problems can be easily resolved. But if those come in you

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need to involve the State Police or other agencies, we'd like to know again so that if you have to remove staff we'll know where they are and how to get a hold of them. And in general those things that cause you to activate your continuity of operations binder you're \_\_\_\_\_.

Secondly are those responses at which your agency is actively involved. As many as you know I spent some time at DEC so I'm familiar with the types of responses and events in which they're involved so I'll use them as an example and the things that of the list that we would like your agencies to create, send into DHSES so we'll know you'll be reporting those according to your EMOP. A large search and rescue or a significant wildfire. And in particular those that involved multiple agencies, cross jurisdictional boundaries or have significant media interest. We might not necessarily be interested in a small fifteen foot duff fire in the Adirondacks but something that's happening say in the Albany Pine Bush that's causing smoke to go across the Thruway. We're probably going to get calls about that and want to know what's happening so we can provide the information. \_\_\_\_\_ or DEC controlled or operated a flood controlled structure at a DEC regulated dam. The \_\_\_\_\_ one of those structures may have downstream impacts on critical infrastructure and may require additional state resources. They might require an activation of the EOC. They may need us to reach out to other state agencies again bring in another partner so that's something we're going to want to know about. A significant spill or hazmat incident – again in particular those involve multiple agencies, impact sensitive areas that have the potential to impact the health and welfare of individuals, cross jurisdictional boundaries or involve response of a federal agency. You know if there's a three gallon spill on the side of the road we might not want to know about it but we're again going to want to know what triggers you're going to call in as. DOT to continue with examples may want to include an accident that causes a traffic disruption or roadway closures on significant roadways. Predominately if it's a major roadway is impacted or are the roads going to be closed for a long period of time. We want to know these things in case we have to start planning for localities to move emergency equipment. If they traditionally have paths set up for their ambulance and their fire trucks to go, it's important that we know what's going on so we can reach out to our emergency management partners in the county and let them know roads will be closed or there's an issue that they're going to have to work around so that they're not caught off guard if they have to dispatch some kind of emergency services to a location. Or for DOT if you have an airport that you operate, we'd like to know if there's a closure or something else is impacting that airport. And these are just a few examples your agency will need to consider what they're responsible for and what they respond to as you develop a list of incidents that will be reporting into DHSES. Anytime your agency reports information to the watch it is important that you include the essential information of what you have and that should include: the who, the what, the when, the where, the why and all of the information you had. We recognize there are often challenges in early reporting. Sometimes information is accurate and sometimes it's not exactly what had hoped and we understand and can accommodate that. And we also know that that information will get more refined as staff show up to the scene or if information starts getting exchanged. It is also important to provide updates. Once an activation starts, somebody starts receiving reports, that the incident may end but we also need to know when the end is so that we can adjust accordingly. And lastly do not rely on another agency to report in. If your agency is responding to an incident, it is up to you to make sure to report those actions into DHSES. We recognize that that might result

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in multiple reporting but we're okay with that. We can sort that out as that goes on. Next slide please.

So as part of our responsibilities DHSES is tasked with the gathering and reporting of information out to executive leadership within the state. The reporting we're requesting for the agencies is a chance for your agency to tell your story and present what you're doing. It is an opportunity to get information in front of all of the agencies and executive leadership and paint a picture about what your agency's doing in relation to the event. You need to make sure you include everything that's pertinent to the incident. If it isn't a report, the information of what your agency is doing may go unrecognized. We cannot assume that people know everything that is going on. Our goal is to have simple uniform reporting and to insure that we have the necessary information to compile accurate and informative LIR's which will be used to make informed decisions. As I mentioned earlier, we will be sending out more detailed and the reporting guidance, an example report and a copy of previous LIR's to the Commissioners of Emergency Managers after this meeting. Your updated agency EMOP reporting criteria will be required by February 1<sup>st</sup>, 2022 and can be submitted to [emop.dhSES.ny.gov](http://emop.dhSES.ny.gov). If you have any questions regarding EMOP reporting, you can contact 518 292 3025. And if you have any questions regarding incident reporting you can contact us at 518 301 2014. Next slide please.

My information's up on the board. If you have any questions, you can also contact me and we look forward to working with you and thank you for your time. Any questions? Okay thank you everyone.

Jackie Bray: Thank you Matt. You know I, I do want to say that I think so often in emergencies I just want to hammer a couple of points that Matt made. The first is that so often there's information moving and swirling and people are understandably rushing to get information up the chain. What we want is verified information in an organized fashion. There are not gold stars for the first people that report something up the chain. Right? There is what's important is that it's verified information, it's inside your scope of control and authority and it comes in an organized fashion. And we're going to do our part at DHSES and at the Office of Emergency Management to make that as easy as possible for all of you. We're never asking for information just to ask for information. We're always asking for information in order to be able to do our jobs and to support you in doing your job. Okay. Any questions? Alright let's move right along. Terry Hastings you're here somewhere. There you are. Alright. Terry's going to give her presentation on the State Homeland Security Strategy. The one thing I want to say about this strategy, many of you are old hat at it, is that it is required in order to act the Department of Homeland Security, Federal Department of Homeland Security grant dollars. And so, it's really important. Many of you receive those grant dollars. Many of your critical programs are supported by those funds. We have to submit this strategy and it's not a DHSES strategy. It's a statewide strategy in order for you to get those funds. So Terry take it away.

Terry Hastings: Right. Thank you Commissioner and thanks for having me today. Next slide please. So my purpose here today is really to provide you with an overview of the effort

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to update the State Homeland Security's strategy as Commissioner Bray mentions an important document to us and we have to maintain it on an ongoing basis. Next slide please. Next slide.

So, first and foremost it's really intended to help guide Homeland Security related planning and investments and probably most importantly as the Commissioner mentioned it is a requirement to maintain eligibility for those Federal Homeland Security grant dollars that we all benefit from in some way. And to the tune of over two hundred and fifty million dollars annually. So, again it's obviously to maintain compliance with all grant requirements to include updating the strategy and it's also really important with from an \_\_\_\_\_ perspective because all of our grant dollars have to link back in some way to the state strategy. And there's regular audits that go on where they actually go through that process. So, it's really important that we maintain and updated strategy. Next slide please.

So, again the Commissioner mentioned, it is a statewide strategy it's not a DHSES strategy, it's all encompassing if you will. It must reflect state and local priorities which is why we make a really a concerted effort to engage our state partners and our local partners to ensure that they can see themselves in the strategy and that it actively reflects their priorities as well. And really it's also an opportunity to explain Homeland Security in New York State. Homeland Security certainly as a discipline has evolved over time and here's a chance to really explain what it means to us and we have incorporated performance measures in the strategy that frankly was one of the big improvements we made over time. DHS is part of their auditing requirements and really asking states to identify performance measures so that we can measure progress. So, we've done that in our strategy. Next slide please.

So, our current strategy if you will, it was updated in 2017 includes ten strategic goals over a hundred objectives so it's very comprehensive in nature. We vetted it with over fifteen hundred stakeholders. Again, we make an effort to really share this thing far and wide to make sure that everybody can clearly see themselves in the strategy. Next slide please.

So, we are updating it obviously. Didn't require a drastic update but there's several updates that were made really to ensure that it accurately reflects the current operating environment and priorities based on a variety of factors to include executive level priorities and initiatives, lessons learned from previous events including COVID-19, feedback from our state and local subject matter experts, our risk and capability assessments that we do every three years with our counties through our CEPA Program and state and local spending trends and then finally guidance that we have received from the Federal Government and best practices that we've identified over time. Next slide.

So, the way we update it, we put together a small project team of the policy shop and DHSES which I lead. Kind of coordinate the effort but we work to engage a broad group of stakeholders. We've had one on one conversations with many agencies in the room and then once we get a draft that we think is ready for review and comment, we'll socialize it with a very broad group, make sure that everybody has a chance to review it, provide feedback and then we address that feedback as part of the finalization process. Next slide please.

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So, here the key components. The overview includes our mission, what we want to achieve at a high level, what our vision is, the risk profile's really important. That's a component that has to be included. Really explains the threats and hazards here in New York State, some trends, some data we include. Our goals and objectives are really what we want to achieve and how we're going to go about achieving it. And then we have a appendices with performance measures and other relevant information. So, this has been mentioned a couple of times today but we do take an all hazards approach so it's not just terrorism that we're concerned with. Obviously that's a major threat. But we look at natural disasters, public health emergencies, cyber security and a litany of other threats and hazards. And then when we talk about risk, we look at it through the lens of threats, vulnerability and consequences so that's how we sort of look at the overall risk picture here in New York State. So, here's the current goals. These are draft or subject to your feedback. They have not changed drastically over time. We've been relatively consistent but there is opportunity to make up these if need be. But you can see it covers down on a lot of different areas – intel, information sharing, counter terrorism, cyber security you name it, it's in there. Again, Emergency Management, Emergency Communications, Health Emergency preparedness. We've included the goal for resiliency after disasters. So, again you should be able to clearly see how your work contributes to the strategy when you see it. So, performance measures is something we've been working on for a while. So, each goal and objective includes a series of targets in metrics that helps us measure progress over time to determine, you know, are we heading in the right direction? Is there something else that we need to modify? Next slide.

So, some next steps. We have a draft that's ready for review. We're going to get that out to you very soon definitely this month so you can take a look at that. Again, we'll have a process by which you can submit feedback and we'll address that feedback on the backend. We'll share it with the DPC partners obviously and also our state, other state agencies and local partners. Again, we want to make sure it's inclusive. So, feedback will be, we'll ask for feedback in January. We'll give you a suspense date on that. And then after we get that feedback we work to adjudicate all of those comments and update the final draft in advance then up for final approval. So, we hope to have it done in early 2022. It will be on our website and we'll circulate it with everybody here. And with that I'll be happy to answer any questions about the state strategy. Okay. Thank you very much.

Jackie Bray: Okay, thank you Terry. The final item on our agenda today is the real last but of course not least, it is probably the thing all of us have spent the most time over the last two years focused on. We have with us today Dr. Emily Ledderlow. Emily? Ah, heading up there okay. Thank you. We're going to, she's going to walk us through where we stand in the pandemic today. I will just say you know I think it's really important that we all be exceedingly clear-eyed that this is not over and that we be ready as a leadership team focused on helping communities prepare and respond to disasters to continue to lean in. I know we are all exhausted from this pandemic. I feel that personally and professionally but it is up to us to help individuals continue to have the energy required to keep each other safe. Dr. Ledderlow?

Dr. Emily Ledderlow: Thank you. So, first of all can everyone hear me okay? Okay. And do I have something to move the slides? You? Okay, thank you. So, I was asked to give an

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update on epidemia, on the epidemiology of the COVID-19 for this group today. So, I thought I had, and I, I have to, I apologize. I mean I'm an epidemiologist. I cannot not show you a little bit of data in the form of graphs and things like that but I wanted to...

Jackie Bray: We love graphs and data.

Dr. Emily Ledderlow: Okay, wonderful great. So, so you will like this presentation I hope. So, the first plot here shows the New York State COVID cases and testing timeline. And what you see here this goes all the way back to March 1<sup>st</sup> of 2020 when we were just starting the pandemic here in New York and the blue bars are the number of tests done per day. And the short gray bars at the bottom are the number that test positive and you see that it's a very small percentage of the tests that are done which is the way it should be. I mean ideally we want that to be well under 5%. If it's much over that you're not doing enough testing. Then the thick orange line are the cases per one hundred thousand population and that's a moving seven day average to smooth it out. So, what I want to show you here is way back in March and April of 2020 we weren't doing much testing because it just plain wasn't available. So, that orange line there is like completely fiction. I mean if we had been doing the testing that we, you know if we had had the testing capability back then that line probably would be well off the top of the chart. And then you can see about December of 2020 and we did pretty well during the summer of 2020 while a lot of other states were having a surge. But then November, December of 2020 going into 2021 we had our winter surge and you can see at the very far right-hand side of the chart we appear to be having that again. So, we are starting to get some hints that this virus might be seasonal. I can't say that definitively yet and you know we didn't really know if this virus would turn out to be a seasonal virus like flu or not but we're starting to get some hints anyway that that might be the case. Then you can see last summer we were doing pretty well at the beginning of late June, beginning of July and then the uptick that you see in late summer of 2021 is the advent of the Delta variant. And we never really recovered from that and now we're into winter and we're having another surge and not only that but now we have Omicron and we don't really know what's going, what that, how that is going to impact things yet. Next slide please.

Okay so here is actually what we are starting to consider to be probably a more important representation of what's going on with COVID even then the case numbers. And this is hospital admissions and I'll get into why this is probably more important a little bit later. But you can see that you know we had at the beginning of the pandemic and this only goes back to about I think May. Again, you know we, if you go back even farther it would have been off the top of the slide there. But we had our winter surge in, last winter and we're starting to get another one. It looks very similar to the previous slide but one thing to look at here, right now we're in mid-December and if you, you know, if you can draw an imaginary line over to where we were in mid-December with hospitalizations last year, we're actually doing a fair bit better now. And that probably is a result of immunizations because we have a much smaller percent of the population that has, you know, is completely susceptible to this virus and is going to get severe disease. So, that's one positive here. Could we go to the next slide please?

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Okay so let me talk a little bit about variants. So, this starts from April of this year when you know we had a number of different types of variants floating around Alpha, we had a lot of Alpha and we had some Iota. We had a fair number of others and then you can see in about June, Delta is the gray one and it started to take over. And you can also see that in July as Delta took over our case numbers started to rise. And now we have like almost all Delta. Omicron is on this one but you really can't see it. It's the very, very teeny tiny gray bar at the bottom of the far left bar. The darker one is just kind of other but there's an even smaller one there that's the beginning of Omicron. So, it's going to be very interesting to see what happens with that one. I'm sure you've all been reading the news and you know that in South Africa it's like taken over. But there in South Africa it took over in a situation where they did not have much Delta going on. It's their spring and summer and so they were at a \_\_\_\_\_ as far as COVID cases so Omicron didn't really have much of anything to compete with and it just took off. So, here in New York obviously we are in fall and winter and we have a lot of Delta. So, we're all very interested to see what is going to happen if they will, if the Omicron will completely out compete and take over or if they will both circulate. Next slide.

So, let me just give you some Omicron basics here. As you all know it was first detected in South Africa in late November. It's since been detected in other countries even earlier so we don't really know if it started in South Africa or if it was just picked up there. They had an outbreak in a university that caught attention so that's how they were, you know it was first picked up there. It's been classified as a variant of concern by both WHO and CDC and so far in South Africa we obviously have seen very rapid spread and there were some early concerns that young people might be more susceptible and there were also some concerns that it might be a greater severity than Delta. So, since this slide was written we certainly do suspect that it's much more highly transmissible than Delta. But as far as the severity I think that's to be determined. It's certainly not so far looking like it's going to be more severe. If we're lucky it might be less severe or it might be about the same. Again, those types of studies to really sort that out take a while and they, you know, they're just getting off the ground. So, it has already widely spread. It's on six continents and I think this is an important point to make. By the time we know about these variants, I think you can presume that you already have it and that's what we found here. By the time we knew it, we had it here in New York. Next slide please.

So, this graph shows our cases by vaccine status and our vaccine effectiveness. So, the first of all, the blue line are cases amongst unvaccinated per one hundred thousand and vaccinated people. And you can see that, you know, they really took off once we got Delta and they're surging again. The cases in dark red at the bottom are cases per one hundred thousand fully vaccinated people. So, a couple of points to make here on this graph. First of all, you can see that even amongst vaccinated people the case numbers went up a little bit starting in July and we think that's because of the Delta variant. The vaccine still works quite well but not as, not quite as well against Delta as it did the earlier variants that it was really made for. The other thing on this graph is the black line at the top and that's vaccine effectiveness. And you can see that, you know, on the right before we had, before err sorry on the left before we had Delta it was very high. It was at 90 percent or higher for to prevent cases. And then Delta came along, time passed. It's hard to pick out how much of the, you know, decreased that

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you see there is just from waning immunity versus Delta. I think we think Delta played a large role in it. But it went down a little bit. It took a bit of a hit went down to about 80% and thus far has stayed fairly stable to prevent cases. And just so everyone knows when we say vaccine effectiveness this doesn't mean that, you know, it will prevent 80% of cases. What it means is that if you're vaccinated, you have an 80% less chance of getting it than if you're unvaccinated. So, keep in mind, keep this in mind, keep in mind where the line is for vaccine effectiveness around 80% and keep in mind that this is for cases. And now please go to the next slide.

So, here's what it looks like for new hospital admissions and vaccine status. So, you can see that again let's look at the red line at the bottom first. These are fully vaccinated people. It went up a little bit in July and August when Delta appeared but it stayed you know fairly low. On the other hand we saw a big surge in unvaccinated people and that's because we have you know the unvaccinated people they're completely susceptible to this virus. There's probably some immunity to the unvaccinated population who have had, who have been previously infected but that's a small proportion of the people who are unvaccinated. So, that really took off and most of our hospital admissions for COVID now are driven by unvaccinated people. The other thing to look at here is the black line at the top. So, this is vaccine effectiveness for hospitalization and you can see that it looks, it still looks really good it's you know well over 90% effectiveness to keep you out of the hospital. And that actually is really the primary purpose of these vaccines. I mean when the pandemic started and you know we didn't really know how well the vaccines were going to work. I remember in the fall of 2020 I was like ecstatic when I heard the first data coming out about how well the vaccines worked because, you know, for respiratory viruses like this, you know we don't have a lot of vaccines that work against them. You don't get a vaccine against you know your rhinovirus that causes a cold or you know there are actually four coronaviruses out there that float around every year and cause colds and flu like illness. You don't get a vaccine against them. And there are a couple of reasons for that. First of all, mostly they just cause colds and second of all you know we don't know how we didn't really know how easy it would be to create a vaccine against these types of viruses. So, we didn't really know if they would work at all and I think right from the beginning we suspected that you know if we got lucky enough that they did work and work against severe disease we still suspected that you know they probably people will still get infected with mild disease even if they are vaccinated. And that's what we're starting to see here. But again, the primary purpose is to keep people out of the hospital and you know we don't think we're going to get rid of this virus ever. It's probably always going to be with us and eventually we will probably end up treating it like, you know, flu or like one of the other cold viruses. So, this is an important slide here that shows that the vaccines do work for what their primary purpose is even in the face of Delta. Now we have to see what happens for Omicron. So, next slide.

Okay this just shows you the percent of people in New York State with a complete vaccination series by age group. So, either one J and J or two Pfizer's or Moderna's and we just recently added the five to eleven age group. You can see they're about 11.3% which is pretty good given that they were really only eligible to be vaccinated for you know like I guess it's about a month now. So, I'm hoping that those will go up and you know, of course, the children generally don't get all that sick but you know if you do the math which you know

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FDA and CDC have done, it's still safer for them to get the vaccine than to get the, than to get sick. And they also continue to the spread in larger community which contributes to the ongoing you know the duration, you know the ongoing nature of the pandemic which I'm sure we're all sick of and it's in their best interest and everyone's best interest too to get this over and done with. So, you can also see that we're doing pretty well with the older age groups. I think that, you know, they saw all of the deaths that we had and you know they understood that they were at risk and got vaccinated and now, you know, we're trying to convince the younger adults of the same thing. Again, if you, I think a lot of people don't understand this. I think they think oh, you know it's, I, I, know I'm not at all of that great a risk. I'm a, you know, young healthy adult but they don't understand that they are at risk and it's a much greater risk than getting the vaccine. Next slide please.

So, getting back to Omicron for a minute this shows that the variant has now been detected pretty much throughout the U.S. and I would expect that the slides that are in light green which is where it has not yet been detected as of yesterday anyway, probably some of them now are dark green by today and if they're not dark green that's not because it's not there that's just because it hasn't been picked up yet. So, we are all kind of waiting in anticipation just to see what's going to happen with Omicron. Next slide.

So, whether we have Omicron here or not and whether it takes over or not, the mitigation measures based on what we know now, we basically need to stay the course. And probably the most important thing to get over and done with this pandemic is to continue efforts to vaccinate the unvaccinated and secondarily to provide boosters to those who are eligible and you know emphasize appropriate recommendations on masking and physical distancing and avoiding large gatherings and good hand hygiene and staying home if you're sick and getting tested and so forth. You know, we're asked all the time what else can we do, what else can we do? And really it's, you know, it's more of the same in doing what we know works well. Next slide.

So, what are we at DOH doing? I mean I know a lot of, I don't think I have to tell this group what we're doing but I did want to include this. You know, we're doing mass vac sites and I know I think a lot of you in this room are very closely involved in that. We're also doing some testing sites. Here in my division of Epidemiology we're doing a lot of surveillance for both cases and hospitalizations and deaths and counting them and making those nice charts that you saw and interpreting them and using them to make recommendations going forward. We're also doing some science and, you know, carefully looking at things like what's happened to the vaccination rate and you know what's happening with people who have been previously infected and that type of thing. We have a call center. We do outbreak investigations and we create a lot of guidance for local health departments and schools and other entities. So, we're still very, very busy I mean my work right now is still almost entirely completely COVID and that's the case for many other people in our division of Epidemiology. Next slide.

So, when I was asked to give this talk I was asked to talk about where we are now and also where we think we might be going in the future. So, you know, my, whenever I'm asked that my first inclination is, you know, I really wish I had a crystal ball so I could tell you but we

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can make, actually make some educated guesses here. So, like I said before, most people, you know, who work with COVID now in Epidemiology and Immunology and Clinical Medicine really think that this virus is going to be with us permanently. That's not a big surprise. There's been some speculation that the other four coronaviruses probably all of you in this room were infected with as, you know, babies or children and re-exposed throughout your lives, they probably came into the human population much like this one did. It's just that it was in antiquity or, you know, far enough back in history that, you know, they obviously couldn't test for it and didn't know what it was and probably thought it was the flu. So, probably the same thing happened to them as, you know, probably will end up happening with this particular virus. And again this is partially speculation but it's educated speculation. So, one of my concerns is that I think there are a lot of people out there who, you know, are resisting vaccination and maybe they think well I've avoided it so far the pandemic, you know, it's going to get over with and I don't need to worry about it, I'll be safe. And, you know, I want to tell them well that's not quite right. You know we don't think this virus is going away and if you haven't been infected or vaccinated so far you're most likely going to get infected or vaccinated whether it's now or a year from now or five years from now. So, my bullet here is got a little bit messed up here but so we need to think of the purpose of vaccination as to provide a baseline level of immunity for the population that's sufficient to prevent most severe disease, so hospitalizations and death. Not really to prevent your mild cases. I mean eventually as we transition out of considering this to be a pandemic response and more of an, you know, what we call an endemic response so, you know, a virus that is that circulates normally in the population like other viruses do we want our population to have immunity to this virus just like all of you in this room and the rest of the people in New York State and the U.S. have some level of immunity to the other coronaviruses and other respiratory viruses, you know, that circulate in our population and around the world every year. And, you know, the reason that they don't cause, that they don't wreak such havoc most likely is because you've been exposed to them since childhood and, you know, when you probably got sick and but you did fine because little kids are good at dealing with new viruses because every new virus, every virus is new to them. And then you were exposed over and over and you built up immunity over your lifetime and then this new coronavirus comes on the scene and no one has any immunity to it and now we see what happens when you introduce a new virus into such a population. So, we kind of think of vaccination as providing a baseline level of immunity to the population in substitution for the immunity that you would have gotten from childhood if this virus had been around forever. And it doesn't really matter if it's not complete immunity. I mean you can still, you still get colds even though you've been exposed to those viruses since childhood and the same is probably true with this virus but you don't end up in the hospital with this cold and we need to protect our hospital capacity and that's why we really are trying to get the, the population immune to this virus. So, like I said we eventually likely will transition to an endemic state where COVID is treated similarly to influenza. We track influenza and one of the reasons we track it is that sometimes in a bad flu season you can stress out the hospital capacity. But we still have many times the hospitalizations and death from COVID compared to what we usually see with influenza each year and before, you know, we're all sick and tired of this pandemic. I'm sick and tired of wearing masks. I'm sick and tired of, you know, not letting my kids go on play dates and you know all of this other stuff that we're doing. And, you know, once we get close to 100% of

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the population at least partially immune then I think we'll be ready to make the transition back to, you know, our prepandemic normal or something close to it. So, next slide please.

So, this slide is my last one. It shows the, it shows in blue what if you look on blue in blue on the left there what a normal influenza season looks like. And these are numbers of hospital admissions. So, for the 2019 to 2020 influenza season we had just over twenty-two thousand influenza admissions in New York State. And that's a fairly typical flu season for New York. Then you can see that last winter 2021 when, you know, we still have a lot of COVID mitigation measures in effect, we essentially didn't have a flu season. And that's probably related to the mitigation measures we had here and also the mitigation measures that other countries had around the world. They're just, you know, they worked well enough to prevent viral transmission that we stamped out flu. It's a little scary because we were able to go from, you know, a flu season that looks like what you see there for 1920 to a flu season that looks like what you see there for 2021. So it makes you wonder what would have happened to COVID if we didn't have these mitigation measures. So, the kind of orangish/brown line there is COVID hospitalizations. And in the dataset I was looking at we don't have the admission data before May 2020. But if we did it would be far off the top of the graph here. And then you can see that we had our winter surge last year and then you can see again this graph follows the same pattern as you saw earlier with cases and well with hospitalizations I've shared this before and you can see that we're starting our surge again. But what is a little bit frightening is if you look down at the very bottom on the right you can see our flu line for this year for this season is starting. And we see a little bit of an uptick there so we do think we're going to have a flu season this year probably because we don't have as many viral mitigation measures in effect either here or elsewhere in the world where, you know, where flu comes from before it gets to the U.S. So, this is worrisome because we're already dealing with hospital capacity issues with COVID and you may have heard the term twin-demic out in the, you know, the press and we don't want that. We don't want a bad flu season on top of what we still have with COVID. So, this is something that we're very much keeping a close eye on and why we, you know, we hope everyone will get their flu shot when they get their COVID shot and, you know, that so that's what, that's what I did for my kids when they were eligible for the COVID shot they went into the doctor and got COVID in one arm and flu in the other. So, we're really hoping to avoid this type of thing but I'm encouraging not just COVID vaccination but flu vaccination. So, I think that's all I have. Can you go to the last slide? Oh, and we have someone else's name on here but I'm not sure is there any time for questions or do you want me to take questions?

Jackie Bray: Yeah absolutely.

Dr. Emily Ledderlow: Okay.

Jackie Bray: Questions?

Dr. Emily Ledderlow: Okay.

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Jackie Bray: Will you speak a little bit to the phenomenon of long COVID and whether or not we expect to see with increased vaccination people continuing to experience non-acute COVID.

Dr. Emily Ledderlow: Yeah. So, so first of all what is long COVID. The, the best answer honestly is we probably don't know exactly what it is. It essentially is a phenomenon where someone gets COVID, they get over the acute illness as, you know, they don't have it's not like they're infectious or still have virus hanging around or anything but they just continue not to feel well and I think the suspicions are that it has something to do with, you know, your immune system kind of gone haywire and not recovering properly. We have seen similar phenomenon's before. I mean, you know, there are reports in the literature of, you know, like people not doing well after various viruses and, you know, sometimes it might be called chronic fatigue or, you know, there are a number of other entities out there that might be related to this in some fashion. We just, we just, you know we don't in the year 2021 we don't know everything there is to be known about the immune system. So, so, you know, we're learning more and more about long COVID. My, it has not been seen after vaccination so, you know, it pretty clearly is something that's related to the infection and your body's reaction to the infection. So, I am hopeful that we won't be seeing as much of it and, you know, I'm also hopeful that, you know, the fact that we have it the one small silver lining is I think it's going to draw attention to these types of illnesses that really do create a lot of disability and, you know, inability to work and, and misery amongst people who end up with them after an infection.

Jackie Bray: Thank you.

Dr. Emily Ledderlow: Uh, huh.

Jackie Bray: Other questions? Okay so I just wanted to say two things and would invite Christian in to if you want. You know, when we think about what the state is doing at large between the Department of Health or DHSES or so many of you about how to go into this winter surge but keep everyone safe. I think obviously as the doctor said, the number one take away is we need to get as many people as possible vaccinated. If they're over sixteen we need to get them boosted. The FDA and the CDC did just approve boosters for sixteen and seventeen year olds. So, I would just say that once we're vaccinated, once we're boosted, once our kids are vaccinated our job isn't done. We have to continue to have those hard conversations with everyone else in our life about getting them vaccinated. What we're seeing is that that one on one education and the sort of opening to the holding space with empathy to have conversations that can be difficult for people is what's moving people. So, I would just from ask everyone to stay engaged in the vaccination effort. That's in an interpersonal way. Organizationally you may hear from either DHSES or the Department of Health about help we need this winter increasing vaccination in some of our counties that continue to have lower vaccination rates. And then the second thing is obviously as a state, the Governor is very focused along with our new Health Commissioner, Dr. Bassett and her team at the Department of Health on a hospital capacity and health system capacity were at large so you've seen that we've deployed National Guard Medics to some long-term care facilities in an effort to just decamp the hospitals or help discharge patients from the hospitals

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you're going to see more and more of that as we attempt to protect the health system from what we expect to be an increasing surge at least through, you know, post holidays and through the middle of January. Anything you would say in terms of what you might need from us as a Health Department in the response this winter?

Dr. Emily Ledderlow: That's hard to say so far. I just want to make sure, you know, I just want, I, I just want to, I just want everyone to understand though that here in EPPY and in many of the parts of DOH we still are almost entirely focused on COVID and our people are burned out. We lost a lot of good people during the course of the pandemic and it's still, it's still a really tough time for DOH. So, you know, we're, we're, I guess I just want to say we're doing our best and, you know, we had a lot of people deployed for example to mass vac sites for weeks and even months and, you know, away from their families and even before vaccination when they were putting their lives at risk and they're all, you know, they're all, it's going to be a long recovery and I think that that, you know, that in some ways effects what we can do and how much we can do.

Jackie Bray: Well we are all here to support you and obviously it supports the state and that's a joint response.

Dr. Emily Ledderlow: Thank you.

Elisiha Tomko: Thank you.

Dr. Emily Ledderlow: Uh, huh.

Male: I would just want to echo what a, thanks Commissioner, just echo what Commissioner just said about, you know, the final hopefully the final push here when it comes to COVID. I know, you know, we'd act and I personally have asked a lot from your agencies over the last two years. I appreciate all of the support that you have given us. And I hope that we can count on that support for again, for the next final push here as we get over the finish line when it comes to as Dr. Ledderlow said maybe changing this pandemic to an endemic and getting to a stage where things are much more stable. But I appreciate the support. We're going to call on you and your team to hold more in the next few months but I know you all will step up and get things done and I appreciate them.

Jackie Bray: Thank you. With that we'll adjourn. And I thank you all for coming. We'll be back here in about six months. Thanks guys.