## National Adult and Influenza Immunization Summit "Setting the Stage for 2024-2025 Respiratory Virus Season: Where Are We and Where Can We Go from Here" Webinar Q&A: May 16, 2024

## **OUESTIONS AND ANSWERS**

Q: Are there any thoughts about why there were such differences in the peak influenza dates among the different regions? Does it correlate to vaccination coverage rates?

Alicia Budd (CDC): It's not at all unusual for us to see timing variations across the country with influenza activity, or really any of the respiratory viruses, for that matter. No, I don't think it's due to vaccine coverage. Unfortunately, I don't think we have enough vaccine coverage to have that level of overall impact. You know, it can be a variety of things. A lot of the time, it's just a matter of when that introduction [of disease] happened, when things hit with the holidays... it's really multifactorial in terms of how it goes. We've seen activity in certain parts of the country take off early due to outbreaks at University Greek Rush. We've seen activity in Alaska happening early because of cruise ships. Different things happen at different times: schools close at different times and schools start at different times. And we know that kids are a big vector of respiratory illness. So, lots of different causes, but not any one particular answer.

Q: Since many mammals are dying from CNS disease, any concerns about humans developing CNS infections? Are there receptors in the brain for H5N1?

Alicia Budd (CDC): We have not seen humans with neurologic illness from H5 like we're seeing in some of these other animals. I don't have a lot of detail about that other than to say it's not been something that's been recognized so far.

Q: How can we get instruction/guidance from the CDC or others for structure and requirements for communication between epidemiology and the immunization providing branches of our local institutions to assist with pandemic and outbreak response? It has been difficult to get emergency response, health and human services, immunizations, and epidemiology to work together without a mandate. Not to mention that some of these areas get more funding allocated to them for response, but then also need assistance from these other [less funded] areas.

**Brendan Jackson (CDC)**: I'm not aware of any easy answers, and it's something we struggle with at CDC and are always working to overcome. Your CDC health department liaison may be of help in thinking through these issues and ideas and as a key bridge point with CDC resources. They can also help connect with other health departments on lessons learned for how they address these issues. As an aside, I'm personally a big fan of the book Team of Teams that deals with this type of issue in a different situation (but that's not a federal endorsement by any means.)

Q: COVID, RSV, and flu rates were high in December/January, are you attributing those to increased interactions around holidays?

**Ben Silk (CDC)**: That's a great question and not an easy one. We've been wrestling with this quite a bit. We did a technical review. I showed you a little bit on COVID seasonality, and I

don't think there's a simple answer. I'll say "yes" to the question, but the way we framed it is that it's a complicated interaction between the epidemiologic triad of host, virus, and environment. So, multifactorial. In the host, there's the immunity that we have built up through natural means with infections, particularly the Omicron surge, plus all the vaccination that has happened. That immunity has prevented infections a little but has done much more to attenuate the severity of disease. We've been seeing, for lack of better terminology, what we call this decoupling. So COVID activity has stayed high, but hospitalizations and deaths are going down. Those are some things to think about with hosts. With the virus, it continues to evolve. I tried to share some of that information. We do see this trend, often, where new variants that are substantially different in terms of their immune escape tend to pop up during those waves. I described July through September and then, also, December, January, and February. So the winter peaks often coincide also with variants that have good immune escape. In the offseason, there's been this phenomenon of what we call "the soup," where the viruses are all competing evolutionarily for themselves. And the one with the best immune escape properties seems to emerge just in time for the winter holidays to ruin the party. So host, virus, and then environment, right? So, there's climate that brings people indoors. There are changes in behavior, socially, where we gather to celebrate. And there's even physiological factors where the air is drier and people are more susceptible to viral infections. So, like I said, I have a simple answer, which is "yes," but it's actually a complicated one to address.

**Alicia Budd (CDC):** We often think about people getting together over the holidays as a way to spread the virus. But, one of the things I think we have in our favor is that schools are also not in session. So, at least our little vectors are not sharing quite as much during that time. But it's all a matter of which type of interaction or lack of sort of wins out.

Q: With hospitals no longer being required to report flu hospitalizations to NHSN, how will CDC get flu hospitalization data, especially with adult vaccines, and with RSV and COVID, since we're using hospitalizations and other severe complications as a measure of how well the vaccine is doing?

Alicia Budd (CDC): So we have a long standing hospitalization surveillance system, FluSurv-NET. There's a sister system, COVID-NET and RSV-NET. So, what I'm going to say generally applies across the board. These are systems that have been in place for many years. They are in limited geographic areas, so they are not systems where we're trying to count all the flu hospitalizations in the country, but they do give us valuable information about trends and activity and, also, more specific information about particular hospitalizations if we're seeing anything unexpected in age groups or some of the other demographic characteristics. We do still have visibility on hospitalizations for all three of those pathogens. And with regard to NHSN, yes, reporting is optional, at this point; [yet] there are still hospitals that are reporting. We're keeping a close eye on that. And for those that are reporting, we're continuing to look at those data on the flu side, internally. And I think on the COVID side some of that is being shared, as well. So, definitely still keeping visibility even though the situation is not ideal with NHSN reporting at this point.

Ben Silk (CDC): We have RESP-NET in place.

Q: Given that RSV is circulating a month earlier than previously, any thoughts about changing the RSV vaccination recommendation timings?

**L.J Tan (Immunize)**: I am going to refer to the ACIP meeting that's coming up in June of this year. And there's probably going to be some policy discussions there about RSV vaccination.