PLENARY SESSION

Questions and Answers

- **U.S. Air Force:** Have any recommendations or requirements been made or established for additional infectious disease training for cruise line staff, including medical personnel, as a result of this incident?
 - LCDR Elizabeth Wittry, CDC: That is a great question yes! The vessel sanitation program you might not have heard of them before their charge/mission is to prevent introduction of gastro-intestinal illness to the United States through our ports. Basically, their role has transformed and transitioned into monitoring the conditional sail order and implement it and the phases. As a result, there has been, basically, a control-and-prevention SARS-CoV-2 manual that has been implemented and required for cruise ships to follow. And we have inspectors that go out and monitor those procedures and protocols to ensure that the COVID-19 prevention measures are being followed and strategies are in place. And if we do have a positive on board, there is a plan and an action taken to follow up.
- Anonymous: How were the samples analyzed? Was it RT-PCR, or some other method?
 - **LCDR Elizabeth Wittry, CDC:** Yes, it was RT-PCR. Then positive samples were cultured, but none of them were positive.
- Anonymous: What was the U.S. Coast Guard's primary role during this incident?
 - LCDR Elizabeth Wittry, CDC: They probably had more roles than I am familiar with. But one of the roles is, when the ship was in the bay, they monitored that ship to make sure that other vessels did not interact with it. They were there in case of emergency so that if someone got sick, they would coordinate disembarkation of crew members. If there were some crew members that had gone to the hospital and were free of COVID-19 and felt well, so they joined the vessels, they coordinated that. And, in general, the U.S. Coast Guard really is responsible for some of the safety operations at sea. So, they do inspections on cruise ships to make sure they are able to respond to fires onboard, that they have plans in place for evacuation at the muster stations and such. So, the U.S. Coast Guard plays a critical role still, too, in our COVID-19 response and prevention for the cruise-ship industry.
- **Anonymous:** What was the hardest technical challenge while taking samples? Is this any area where any better solutions have been developed in the last 1.5 years?
 - LCDR Elizabeth Wittry, CDC: I think one of the challenging aspects of sampling was there were two of us that would go in a crew cabin that had an active case during that pre-disinfection sampling. So, it was a little bit scary! Even though we had our full PPE and we checked it, it is a cramped quarter. So, navigating that space to find the surfaces to sample and that symptomatic crew member being there put a little bit of stress. In terms of prevention strategies, I think we have learned a lot and have implemented a lot of prevention strategies. I guess one of the biggest ones what I think we all wished was knowing the role of asymptomatic transmission because we were not wearing masks before. Had we done that earlier that would have helped prevent transmission on a global scale. However, we also were trying to conserve masks for health care personnel; that' is one huge prevention strategy that we have learned. Also, how to implement social distancing no one was familiar with that especially on a cruise ship. Even when the passengers were disembarking during this process, we were told they

were social distancing, but when they were disembarking you could see that they were literally next to each other. I think we have learned different ways to remind people to social distance – having indicators on the ground – but that is a behavioral change too. The cruise ships have learned different ways to definitely help reduce capacity when they are sailing as well.