## Questions & Answers from the PCC Webinar #3 (2/26/20)

Q: Can a person be infected with COVID-19 and another virus like the Flu at the same time?

A: Co-infection with another virus is completely possible. Even co-infection with another Coronavirus is possible. We see co-infections with bacteria, virus, and/or fungi all the time. Coronavirus is not an exception. There has already been discussion on what could happen if the SARS-CoV-2 virus (the name for the virus that causes COVID-19), infected a patient that also had a seasonal influenza virus or another circulating respiratory virus at the same time. The concern of infectious disease & public health authorities was that the two viruses could reassort (mix) in a human and the SARS-CoV virus could become easier to transmit person to person, becoming more common among populations.

Critical patients with Pneumonia and Influenza tend to always have a secondary infection with bacteria that is causing the severity of the illness. In countries where Dengue is prevalent, we see patients with co-infection from "seasonal" influenza along with "seasonal" Dengue. Ultimately, these unfortunate people would likely be immunocompromised in some way, shape, or form, but immunologically and pathogen speaking, this is absolutely possible. There is no reason to think that this can't happen with COVID-19.

Q: Can people who recover from COVID-19 be infected again?

A: Generally speaking, after recovering from an illness, the person tends to have immunity towards the same pathogen for about 2 years, give or take (this is the reason why we get Influenza vaccine every year for example). This general principle would back up the response by the CDC that "MERS-CoV infection are unlikely to be re-infected shortly after they recover". As MERS is within the Coronavirus family and following what generally occurs with all post infection viral immunity, it would be surprising if anything different occurred with COVID-19 (it's not that special).