



MEMORANDUM

To: Whom It May Concern

From: Moderna

Re: Transport of Moderna COVID-19 Vaccine

The Moderna COVID-19 Vaccine (aka "**COVID-19 Vaccine Moderna**") should be stored in accordance with the locally approved label. Moderna recommends that the Moderna COVID-19 Vaccine should be stored and transported in the frozen state at -25°C to -15°C (-13°F to 5°F) and should not be transported or stored below -40°C (-40°F).

We understand however that there are circumstances in which frozen state transport is not feasible. In order to assess the impact of local (also known as "**Last Mile**") transportation conditions in liquid state at $2-8^{\circ}\text{C}$, Moderna has conducted transportation studies. These studies have shown that the Moderna COVID-19 Vaccine maintains its quality attributes in the liquid state at $2-8^{\circ}\text{C}$ for up to 12 hours when shipped: (i) using shipping containers which have been qualified to maintain $2-8^{\circ}\text{C}$; and (ii) under routine road and air transport conditions with shaking and vibration minimized.

Please note: Once thawed and transported in liquid state at $2-8^{\circ}\text{C}$, the Moderna COVID-19 Vaccine should not be refrozen and should be stored at $2-8^{\circ}\text{C}$ until use.