VDH Guidance on Test Results for Common Human Coronaviruses and Novel SARS-CoV-2 (COVID-19)

There are four types of human coronaviruses (HCoV) that regularly circulate around the world every year: 229E, NL63, OC43, and HKU1. These account for up to 30% of upper respiratory tract infections in adults. These four coronaviruses are frequent causes of the “common cold.” Sometimes they can cause lower respiratory tract infections, such as pneumonia or bronchitis.

Because these four coronaviruses are so common, several multiplex respiratory pathogen panels include testing for all four types of HCoV. These are routine tests available at many hospitals and through commercial laboratories. These tests can only detect the four types of HCoV. A positive result on this panel indicates that the patient likely has or recently had HCoV infection.

There are three other types of HCoV that are of public health concern:
- SARS-CoV that causes severe acute respiratory syndrome (SARS);
- MERS-CoV that causes Middle East Respiratory Syndrome (MERS); and
- the novel (new) SARS-CoV-2 that causes the recently discovered COVID-19.

A routine multiplex panel cannot detect SARS-CoV, MERS-CoV, or SARS-CoV-2. Special testing through CDC is required to detect these three viruses.

A routine multiplex panel positive HCoV result should NOT delay or hinder the placement of a patient into care at your facility. Use standard precautions, including respiratory etiquette, and droplet precautions as applicable.

If you have any questions or concerns, please contact 1) your local health department and ask to speak with an epidemiologist or communicable disease nurse or 2) a healthcare provider.