Which Test Do I Need?

COVID-19 TESTING FACT SHEET

### PCR (POLYMERASE CHAIN REACTION) TEST
Tests for an active SARS-CoV-2 infection. SARS-CoV2 is the virus that causes COVID-19.

- **Method of analysis:** The test uses an amplification process to detect the presence of viral RNA in the airway of the nose and throat (collected via nasal swab).
- **When it is used:** When a patient is being evaluated for an active SARS-CoV-2 infection. The test is most accurate when administered within the first week after symptoms begin.
- **Why it is important:** It provides confirmation of a SARS-CoV-2 infection, which allows clinically useful guidance for the patient and health officials
- **Limitations:** The PCR test provides evidence of active viral infection in the respiratory tract. Occasionally, this test may need to be performed twice to definitively rule out SARS-CoV-2 infection. It may come back negative for individuals who are later in their disease course and does not provide evidence of more distant past exposure.

### SEROLOGY TESTS
Unlike PCR tests, which only diagnose active infection, serology tests provide evidence of viral exposure after the initial infection. However, it is not known how long a serologic test will remain positive after initial infection. Serology testing can provide an estimate of how many people have been exposed to COVID-19.

#### ELISA (enzyme-linked immunosorbent assay) Test
- **Method of analysis:** Examines blood for SARS-CoV-2-specific antibodies.
- **When it is used:** To see if an individual has developed antibodies in response to exposure to the SARS-CoV-2 virus.
- **Why it is important:** The ELISA test not only indicates the presence of antibodies, but can provide details on the levels of each different type of antibody – this creates a more complete picture of the body’s overall immune response.
- **Limitations:** Because it takes the body time to develop antibodies to a virus, a serology test may come back negative during the early days of infection even if the virus is present.

#### POC (Point of Care) Test:
- **Method of analysis:** Examines blood for SARS-CoV-2-specific antibodies.
- **When it is used:** To see if an individual has developed antibodies in response to exposure to the SARS-CoV-2 virus. The POC test only indicates the presence or absence of antibodies, not the relative levels of each.
- **Why it is important:** POC tests are portable, can be performed in a variety of settings (workplace, urgent care clinics, etc.) and provide rapid results.
- **Limitations:** Because it takes the body time to develop antibodies to a virus, a serology test may come back negative during the early days of infection even if the virus is present. Since a POC test can only confirm the presence (or absence) of antibodies, it may not provide a full picture of the body’s immune response.