



**Public Health**  
Prevent. Promote. Protect.

## **Butler County General Health District**

### **Statement to the Butler County Community on Antibody Testing as a Diagnostic Tool**

**December 22, 2020**

#### **Antibody Tests Should Not Be Used in Diagnosing COVID-19 nor in Modifying Public Health Action**

Antibody tests are used as a supportive test in conjunction with other evidence, be it clinical or epidemiological, to determine potential immunity or past history of exposure with an infectious organism. There are limits to these tests when used for any disease; however they are more prominent with the detection of a past infection with the SARS-CoV-2 (agent causing COVID-19). Identifying past infectious has academic and clinical significance, but cannot be used to modify public health actions including quarantine and isolation.

The requirements of quarantine and isolation are undeniably burdensome, and the temptation to use antibody tests as a quick method to exclude individuals from quarantine may be extremely strong. While biological analogy and immunological conventions exist that argue for the use of serology tests, the CDC clearly states “additional data are needed before modifying public health recommendations based on serologic test results” (CDC, 2020). The Ohio Department of Health Bureau of Infectious Diseases has reiterated to the Butler County General Health District that antibody tests are not to be used to assume immunity and exclude from quarantine. The FDA and American Medical Association also caution against the use of antibody tests without extenuating circumstances due to the cross-reactivity of the test. This is true for many other diseases that use serology. The CDC also cites research that immunological markers have not been tested enough to determine immunity or past infection.

There has also been confusion regarding CDC and ODH guidance about those with a past infection being exempt from quarantine for the following 90 days. The use of antibody tests to define a past infection for this exemption is not supported by the CDC, ODH, FDA, AMA, or BCGHD. The CDC clearly states that a case should be defined by either a RT-PCR test or a physician’s diagnosis by symptoms. Outdated case definitions used exposure and an antibody test to define a probable case, but these no longer apply. This is supported by the updated case definition of CDC, ODH, and Council of State and Territorial Epidemiologists (CSTE) which list antibody testing as “supportive” laboratory evidence and cannot be used to define a case.

In summation, antibody tests are not to be used to define past infection that would modify existing guidelines for public health action such as quarantine or isolation.