

The Michigan Association of Preventive Medicine and Public Health Physicians

April 23, 2020

Statement on COVID-19 Antibody Testing for Immunity and Return-to-Work Decisions

Antibody tests are not meant to identify persons with active SARS-CoV-2 infection, the novel coronavirus that causes COVID-19 disease, unlike a polymerase chain reaction (PCR) test from a nasal or throat swab. Antibody tests from blood, known as serological tests, have promise to inform treatments, disease surveillance, and determination of immunity after infection. Communities and employers are thus rightfully interested in the potential for antibody tests to inform status on community-wide immunity or decisions for when employees can safely return-to-work after SARS-CoV-2 infection, particularly if infection was mild or with no symptoms.

As of April 23, 2020, the Food and Drug Administration (FDA) has granted emergency use authorization for four SARS-CoV-2 antibody tests. Over 90 tests exist on the market. The following information is currently not well studied and needs to be better understood before antibody testing, even if FDA authorized, can be effectively used:

- 1. Understanding of when and for how long antibodies are produced in a person during the course of COVID-19 disease
- 2. Understanding of what antibody level, if any, confers immunity to COVID-19 disease and for how long
- 3. Evidence for how well a particular test truly detects or not detects SARS-CoV-2 antibodies consistently

Correct physician interpretation of the test result then needs to occur in conjunction with the patient's medical history, local epidemiology of COVID-19 disease, and level of known or suspected individual exposure to COVID-19 disease. At this time, caution is warranted when implementing or interpreting authorized but not validated SARS-CoV-2 antibody tests for critical public health and return-to-work decision making. Once validated, antibody testing will remain one tool in a comprehensive approach needed to interrupt disease transmission. Further research and oversight in the coming months is needed to better identify the utility of SARS-CoV-2 antibody testing in the fight against COVID-19 disease.

The Michigan Association of Preventive Medicine and Public Health Physicians (MAPPP) is the professional society for county, district and state public health physicians as well as preventive medicine physicians in Michigan.