Statement on Antibody-Based COVID-19 Testing

May 4, 2020

There is significant interest in new serology tests that can detect antibodies to SARS-CoV-2, the virus that causes COVID-19. The Rhode Island Department of Health (RIDOH) urges caution with these tests. There are many aspects of these tests that are unknown. This is a rapidly evolving area of diagnostic testing for COVID-19 and may change in the future. The following guidance is provided by RIDOH on use of these tests:

1. Antibody-based SARS-CoV-2 tests detect antibodies in the blood against the virus. There are two types of antibodies that can be detected, IgM, which appear early after infection (about 12 days), and IgG, which appear later (more than 14 days after infection).

2. IgM antibody tests can give false-positive results and should not be used alone for determining infection status.

3. A negative IgG test result means it is unlikely the subject has had past infection with SARS-CoV-2. A false negative result is possible if a person has been infected in the previous two weeks, as IgG antibodies may not have formed. A person may be immunocompromised and not mount an immune response at all.

4. Based on the performance characteristics of the currently available antibody tests, a positive IgG antibody test result is difficult to interpret. A positive test could mean that a person has had past infection with SARS-CoV-2 (true positive) or that the person has had past infection with other common (non-COVID-19) coronaviruses (false positive).

5. It is unknown if a person with SARS-CoV-2 antibodies is protected from future COVID-19 infections.

6. People with a positive SARS-CoV-2 antibody test must still protect themselves and others by adhering to social distancing, wearing a mask in public, following other public health recommendations, and following recommendations specific to their occupation (e.g. appropriate PPE for healthcare workers).

7. Requiring antibody testing for return to work or return to school is not recommended.

Additional information about serology surveillance can be found on the CDC's website at: https://www.cdc.gov/coronavirus/2019-ncov/covid-data/serology-surveillance/index.html