

USET Tribal Epidemiology Center Recommendations for Tribal Consideration

USET TEC COVID-19 Guidance 2022-01:

COVID-19 Testing Strategies to Mitigate the Spread in Tribal Communities



Background

COVID-19 tests have served as a valuable tool in the detection and prevention of community spread of SARS-CoV-2 since early in the pandemic. Testing is imperative for both public health response and clinical situations. There are two basic types of tests for diagnosing a current COVID-19 infection: molecular tests and antigen tests. Molecular tests such as Nucleic Acid Amplification Tests (NAAT) and Polymerase Chain Reaction (PCR) tests are the most common of these tests. They test for pieces of the virus's genetic material. Antigen tests detect certain viral proteins. Both tests have their pros and cons. Molecular tests are more accurate in terms of fewer false positives, but usually take much longer to get results, are more expensive, and can only be done in certified labs with special equipment. Antigen tests are faster (results can often be obtained in 15 to 30 minutes) and less expensive, can often be done at home without any specialized equipment, but have a higher rate of false negatives.

Since the emergence of the [Omicron variant](#), concerns regarding the different impacts that viral mutations have on COVID-19 tests have been expressed by the [Food and Drug Administration \(FDA\)](#). Unlike the [Delta variant](#), the now dominant strain, Omicron, has largely been found to have more mutations, specifically in the S-gene, which encodes for its spike protein. Preliminary data suggests that antigen tests may have a reduced sensitivity for the Omicron variant. Ongoing research and the prioritization of revisions to testing features by companies and developers can assist in better understanding how COVID-19 variants affect the outcome of test results, as well as what tests should be used and avoided. With early findings regarding Omicron having increased transmissibility and potential for reinfection, well-coordinated and frequent COVID-19 testing continues to be vital in the response. To better understand the distribution of COVID-19 and further implement precautions used to mitigate the spread of the virus in Tribal communities, the USET TEC recommends using the home testing strategies outlined below.

Routine/Frequent at-Home COVID-19 Testing

- As mentioned in the [Holiday Season and Other Recommendations USET alert](#), at-home tests can be used to help direct travel and gathering plans.
- Routinely testing prior to departing and upon returning from a trip, and before meeting with others can help slow the spread of COVID-19 in Tribal communities.
- Because Omicron is more transmissible than previous variants, frequent screening is important to quickly identify those with infection and protect healthy individuals.
- Antigen tests may have lessened sensitivities for the Omicron variant:
 - It is recommended that if someone suspected of having COVID-19, defined by either symptomology or exposure, receives a negative test result with an antigen test that they also get a molecular test afterwards.
 - Individuals suspected of having COVID-19 should continue to isolate until getting test results back to determine if they have been infected with the virus.
- When to use an at-home COVID-19 test:
 - If you are experiencing symptoms of COVID-19.
 - If you have recently been in contact with someone who is infected; in this situation you should wait at least 5 days since contact to test if you are not having symptoms (testing too early after exposure can result in a false negative).
 - If you work in a high-risk environment where exposure to COVID-19 is likely.
 - Regardless of symptomology and/or vaccination status, if you are planning to meet with one or more people all individuals should test beforehand.
 - At-home tests can be conducted before attending large gatherings and having home visits with friends and family.

The USET Tribal Epidemiology Center (TEC) is charged under the Indian Health Care Improvement Act with providing epidemiologic and public health support to federally recognized Tribal Nations in the Nashville Area. The USET TEC is a designated public health authority.

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- Availability of at home COVID-19 tests:
 - Currently there is a high demand for all COVID-19 testing services.
 - Although frequent or routine testing is recommended there are known concerns regarding the availability of at-home tests due to the surge of infections.
 - If emergency use authorized rapid tests are accessible to Tribal Nations then the testing approaches discussed above can be implemented and used for public health screening and surveillance purposes, and to support COVID-19 prevention efforts.
 - [The White House](#) has been working on a plan to distribute 500 million free at-home tests across the United States. Recent details regarding the plan state that the at-home tests will be sent to households that submit requests via a designated website.