COVID-19: Testing Resources and Guidance for K-12 Schools
from the Wyoming Department of Health

Updated August 19, 2022

Background
The primary goal of COVID-19 testing in schools is to quickly identify individuals with active infection and minimize spread. COVID-19 testing can be used for diagnosis among students and staff with symptoms of COVID-19 in the school setting. Testing, alongside other mitigation behaviors and practices (e.g. vaccination, face covering use, physical distancing, hand hygiene, respiratory etiquette, cleaning and disinfection, staying home when sick, ventilation) can help prevent SARS-CoV-2 spread in schools and help protect students, their families, teachers and staff. The Centers for Disease Control and Prevention (CDC) no longer recommends routine screening testing in K-12 schools. However, when COVID-19 community levels are high, K-12 schools can consider implementing screening testing for students and staff for high-risk activities (e.g. close contact sports, band, choir, theater); at key times in the year such as before/after large events (e.g. prom, tournaments, group travel); and when returning from breaks (e.g. holidays, spring break, at the beginning of the school year).

The Wyoming Department of Health (WDH) will support COVID-19 testing for both diagnostic and screening purposes in Wyoming K-12 schools as well as in other programs providing services to children, including child care facilities, after-school programs, and summer camps. WDH will provide all testing resources and can also support staffing or facility needs that K-12 schools may have to accomplish testing.

Whether schools and programs conduct COVID-19 testing, as well as the specific tests and testing protocols used, will be determined by the school or program. A school may choose to conduct only diagnostic testing or only screening testing, or both. WDH does not require schools or programs to conduct testing. This document provides information for schools and programs related to testing options available to schools, potential protocols for testing, and other support, such as staffing, that WDH is able to provide.

Definition of Terms Used in this Document

Diagnostic COVID-19 testing: Testing to identify COVID-19 when there is a reason to suspect an individual may be infected, such as having symptoms consistent with COVID-19 or suspected recent exposure.

Screening COVID-19 testing: Testing to identify COVID-19 in individuals without symptoms and without known exposures. Screening testing is intended to identify infected people without symptoms, or before development of symptoms, who may be contagious so that measures can be taken to further prevent spread.

Molecular COVID-19 test: A COVID-19 test that uses polymerase chain reaction (PCR) or other method of nucleic acid amplification to detect the presence of viral genetic material (RNA) in a sample. There are both laboratory-based (tests that need to be sent to a laboratory) and rapid, on-site types of molecular tests available. Laboratory-based molecular tests are the most sensitive type of COVID-19 test available, meaning that these tests are most likely to produce a positive result in a person who is infected with COVID-19. Rapid molecular tests are less sensitive than laboratory-based tests.

Antigen COVID-19 test: A COVID-19 test that detects the presence of specific COVID-19 proteins (antigens) in a sample. These tests are usually rapid tests done on-site. Antigen tests are less sensitive than molecular tests, meaning that antigen tests may not produce a positive result in some individuals who have COVID-19.

Turn-around time: The time from collection of a sample from a patient until the time the test result is available to the patient or patient's provider.
Testing Platforms

WDH offers four testing platforms that schools and programs can use for COVID-19 diagnostic and/or screening testing. A description of each platform is included in this section.

Option 1: Midwest Expanded Testing Coordination Center

This testing program is funded by the Department of Health and Human services and operated by an external contractor. The test is a molecular (PCR) COVID-19 test that is used for screening testing only. Individuals collect their own nasal samples under the observation of a trained person at the school. Samples are shipped or delivered by courier to an outside laboratory for testing. Samples are pooled into groups of multiple individuals; if a pool tests positive, diagnostic testing is conducted on each individual in the pool. Turnaround times after arrival at the laboratory are 24 hours for the pool to be tested, and then another 24 hours to perform diagnostic testing on any positive pool. Individual, rather than pooled, testing may be available if ordered by a licensed provider.

The program provides a portal by which school testing coordinators can manage testing and view results. Parents and patients can also log in to the portal to see individual results. Parents sign a one-time consent form allowing schools to test students at the school for the duration of the school year. Schools will work directly with the contractor for training, set-up, and logistics. The laboratory conducting the tests reports results directly to WDH, satisfying state and federal reporting requirements. There is no at-home testing option for this platform.

Option 2: Vault

*Note that Vault testing remains available at this time but will be discontinued when inventory is exhausted, likely in late 2022 or early 2023*

This is a saliva-based molecular (PCR) COVID-19 test that can be used for both screening and diagnosis. Samples are collected by asking individuals to spit into a tube. Sample collection must be observed by a trained individual at the school or by a provider over Zoom. Samples are shipped to an out-of-state laboratory. Turnaround times are between 24-48 hours. Ordering is done through a Vault online form, and reporting for all tests is done through the online dashboard Vault can provide to districts.

Saliva tests can either be collected on-site at the school or at the individual's home. For on-site collection, Vault has developed a platform so that schools will have a dashboard allowing the testing coordinator to view all students and staff undergoing testing and test results, as well as send test results directly to tested staff members or the parents of tested students. For on-site collection parents sign a one-time consent form allowing schools to test students at the school for the duration of the school year. Alternatively, schools can ask staff and students to take the test at home with a provider over Zoom. Access to a provider is available free of cost through Vault. For at-home testing, Vault has developed a dashboard allowing the testing coordinator to view all students and staff undergoing testing and test results. For at-home testing, consent is done each time a test is conducted through the kit registration process, and results are sent directly to the tested staff member or parent of a tested student via email. The testing laboratories also report results directly to WDH to satisfy state and federal reporting requirements.

Option 3: Curative

*Note that Curative testing remains available at this time but will be discontinued when inventory is exhausted, likely in late 2022 or early 2023*
This is a molecular (PCR) test for both screening and diagnosis of COVID-19. Individuals collect their own nasal samples under the observation of a trained person at the school. Samples are shipped to an out-of-state laboratory. Turn-around times are usually 36-48 hours from time of sample collection. Schools participating will have an online dashboard on which the testing coordinator can view all participating staff and students and their test results. Test results are also sent directly to the tested staff members and parents of tested students via email or text. Parents sign a one-time consent form allowing schools to test students at the school for the duration of the school year.

Curative also sends results directly to WDH to satisfy state and federal reporting requirements. There is no at-home testing option for this testing platform.

Option 4: BinaxNOW Antigen Test

This is an antigen test that can be used for both screening and diagnosis. Individuals ages 15 years and older collect a nasal self-swab under the observation of a trained person at the school; a trained person swabs individuals 14 years and younger. Testing is performed using a cartridge on-site with results in 15 minutes. To perform BinaxNOW testing onsite, schools need to acquire a certificate from the WDH Office of Healthcare Licensing and Surveys allowing them to perform CLIA-waived tests. The application involves a fee, which WDH can support, as well as identification of an individual who is responsible for overseeing quality assurance and control of the testing process. WDH has developed a Standard Operating Procedure, training materials, a competency quiz, and forms to track quality assurance and control. Schools will need to collect one-time consent forms from parents to conduct the testing. Further information can be found here: https://health.wyo.gov/publichealth/infectious-disease-epidemiology-unit/disease/novel-coronavirus/covid-19-orders-and-guidance/

WDH also offers at-home antigen tests for schools that can be given to staff and/or parents to test at home. No CLIA waiver is required for these tests, as long as individuals are testing themselves or their family members.

Routine confirmation of negative BinaxNow results using PCR is no longer necessary. However, for symptomatic patients in which COVID-19 is suspected and who initially test negative on an antigen test, schools can consider repeating the antigen test in 24-48 hours or performing a PCR test.

All positive BinaxNOW test results performed at schools must be reported to WDH. BinaxNOW tests should be reported using a free program called SimpleReport. More information about SimpleReport is provided below in the “Reporting” section. Results of at-home tests are not required to be reported to WDH, but individuals who wish to report the test and obtain a stay-at-home recommendation letter can do so at https://redcap.health.wyo.gov/surveys/?s=YCJ7WDRHGLDDWAC.

Testing Protocols

The CDC school testing recommendations are included in this section. These recommendations may change over time. Schools may choose to adapt protocols according to the local interest and need. CDC testing recommendations can be found here: https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/k-12-childcare-guidance.html

Diagnostic Testing: On-site diagnostic testing for students and staff with symptoms of COVID-19 can help to identify individuals who have COVID-19 faster, as well as remove barriers to COVID-19 testing, resulting in more immediate and complete implementation of public health measures to control transmission. Vault, Curative, and BinaxNOW can be used for diagnostic testing.
Screening Testing: The CDC no longer recommends that schools offer routine screening testing for the general population of staff and students. However, when COVID-19 community levels are high, K-12 schools can consider implementing screening testing for students and staff for high-risk activities (e.g. close contact sports, band, choir, theater); at key times in the year such as before/after large events (e.g. prom, tournaments, group travel); and when returning from breaks (e.g. holidays, spring break, at the beginning of the school year). CDC COVID-19 community levels can be found at https://www.cdc.gov/coronavirus/2019-ncov/your-health/covid-by-county.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fscience%2Fcommunity-levels.html.

Reporting
Reporting of all positive rapid COVID-19 test results to the WDH is mandated by state and federal law. In addition, laboratories such as those used by Curative and Vault are required to report all test results to WDH, whether positive or negative. SimpleReport (http://simplereport.gov/) is a system created by the Centers for Disease Control and Prevention which is HIPAA-compliant and automatically sends results to WDH, fulfilling reporting requirements. SimpleReport also allows schools to maintain and manage their testing records and automatically sends results to participants or parents via text. Schools can use SimpleReport to ask parents to register their students for participation in the testing program.

The following steps can be used to sign up with SimpleReport:

1. Go to https://www.simplereport.gov/app/sign-up/
2. The person you designate as your SimpleReport administrator will go through a process to verify their identity. Sometimes the verification process can happen automatically, other times a 15 minutes video call may be needed. The video call can be completed in one business day.
3. After verification the account will be created and SimpleReport can be used.

The SimpleReport user guide is located here: https://simplereport.gov/assets/resources/SimpleReport_User_Guide.pdf. SimpleReport has a demonstration site available at https://training.simplereport.gov/app/ where schools can learn the features including how to submit a report and set up a patient record. Training videos about each step of the process are available on YouTube here: https://www.youtube.com/watch?v=qVkeizogmeQ&list=PL3U3nqQPGhab0sys3ombZmwOplRYIBoBE. There is also a K-12 start-up guide that can be found here: https://simplereport.gov/assets/resources/k12-guide.pdf. WDH can provide additional training if necessary. Questions can be addressed to the Simple Report team directly at support@simplereport.gov. This inbox is monitored 7 days a week.

Summary of Testing Platforms and Protocols
The table below provides a summary and comparison of the available testing platforms and how they can be applied to the testing protocols described above. WDH is available to have discussions with schools to select a testing platform and develop a testing protocol that works best for each school.

<table>
<thead>
<tr>
<th></th>
<th>Midwest</th>
<th>Vault</th>
<th>Curative</th>
<th>BinaxNOW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of test</strong></td>
<td>Laboratory-based Molecular</td>
<td>Laboratory-based Molecular</td>
<td>Laboratory-based Molecular</td>
<td>Rapid Antigen</td>
</tr>
<tr>
<td><strong>Collection site</strong></td>
<td>At school</td>
<td>At school or at home</td>
<td>At school</td>
<td>At school or at home</td>
</tr>
<tr>
<td><strong>Target Group</strong></td>
<td>May be used for screening testing where community levels are high.</td>
<td>Diagnostic and post-exposure testing of staff and/or students. May be used for screening testing where community levels are high.</td>
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<td>-----------------------------------------------------------------</td>
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<td>-----------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Specimen Collection</strong></td>
<td>Observed self-nasal swab by a trained collector</td>
<td>Observed saliva</td>
<td>Observed self-nasal swab by a trained collector</td>
<td>Observed self-nasal swab by a trained collector or provider-collected nasal swab depending on age</td>
</tr>
<tr>
<td><strong>Ordering/reporting</strong></td>
<td>Portal</td>
<td>Vault platform</td>
<td>Curative portal</td>
<td>SimpleReport</td>
</tr>
<tr>
<td><strong>Time to results</strong></td>
<td>36-48 hours</td>
<td>24-48 hours</td>
<td>36-48 hours</td>
<td>15 minutes</td>
</tr>
<tr>
<td><strong>Confirmatory Testing</strong></td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Consider in certain situations</td>
</tr>
<tr>
<td><strong>Confirmatory Test Type</strong></td>
<td>Repeat antigen in 24-48 hours or molecular test</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Confirmatory Specimen Collection</strong></td>
<td>Observed self-nasal swab or provider nasal swab</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Benefits</strong></td>
<td>Test results reported directly to individual, portal for testing coordinator</td>
<td>No swab needed, test results reported directly to individual</td>
<td>Test results reported directly to individual, dashboard for testing coordinator</td>
<td>Short time to result, quick identification and isolation of infected individuals</td>
</tr>
<tr>
<td><strong>Concerns</strong></td>
<td>Increased turnaround time, requires shipping of samples to laboratory, pooled sampling will result in a period of time between knowing about a positive pool and knowing which individual(s) have COVID-19, cannot be used for diagnostic testing of symptomatic individuals</td>
<td>Increased turnaround time, requires shipping of samples to laboratory</td>
<td>Increased turnaround time, requires shipping of samples to laboratory</td>
<td>Less sensitive in asymptomatic individuals, requires CLIA waiver to perform tests at school, requires extra step sending test results to patients, may require repeat test or confirmation</td>
</tr>
</tbody>
</table>
Other Resources
In addition to supplying testing options, WDH can provide funding to support COVID-19 testing in K-12 schools in additional ways. For example, funding can be used for additional school staff to conduct testing, coordinate the testing program, and/or manage the testing data generated. WDH can also support schools in providing physical space to conduct testing or making modifications or improvements to existing space to allow for safe testing. There may be other resources that schools may need to conduct COVID-19 testing in schools or other COVID-19 mitigation activities. This form can be used to request funding for staffing or other resources: https://forms.gle/NyAJYXL3TDtwLAy48

To support COVID-19 testing in schools, WDH will provide consent form templates, training materials, and surveys to assess interest in and experience with school-based testing and other COVID-19 prevention measures.

Next Steps
Schools and programs that are interested in conducting COVID-19 testing should contact Dr. Alexia Harrist at alexia.harrist1@wyo.gov or 307-777-7716 to set up a call with WDH to discuss potential protocols and resources needed.

BinaxNOW and Cue tests can be ordered using this form: https://docs.google.com/forms/d/e/1FAIpQLSc3r0PK4Vez2SEeDnVlpn-O1xF4ytK5ukrhlwRHp3Pw/viewform

WDH can cover the costs of CLIA waivers for schools. Information about CLIA waivers including the application form can be found here: https://health.wyo.gov/aging/hls/clia-clinical-laboratory-improvement-amendments/

More resources from the Centers for Disease Control and Prevention (CDC) for K-12 schools can be found at https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/index.html.

For more information about the COVID-19 outbreak please visit: health.wyo.gov or cdc.gov.