

# **Tip Sheet on Screening Testing for SARS-CoV-2 in Alameda County Schools**

**Screening testing** for SARS-CoV-2, the virus which causes COVID-19, refers to testing in persons without symptoms ("asymptomatic") and without known exposure to an infected person. The Alameda County Public Health Department (ACPHD) currently recommends that teachers and other staff working in school settings with in-person education receive screening testing at least monthly. Some schools and districts may be considering more frequent screening testing of staff or screening testing of students. This document does not represent ACPHD testing policy but is intended to provide additional information for schools and districts considering such approaches. How well SARS-CoV-2 tests work for screening persons without symptoms, along with the ideal frequency and actual public health benefit of screening in most settings, has not been determined. Developing a protocol for screening testing of staff and students for SARS-CoV-2 should be considered one piece of a broader strategy for preventing the spread of COVID-19 in schools. The other mitigation strategies listed in the Alameda County <u>Reopening Guidance</u> remain critically important even with the addition of a robust testing program.

Any staff or students with suspected or confirmed COVID-19 should remain at home until no longer infectious or at risk of infection. Therefore, anyone undergoing screening testing in a school setting is, by definition, (1) asymptomatic; and (2) not a known close contact to a person with a confirmed infection. Although most SARS-CoV-2 tests performed under these circumstances are expected to be negative, many people with COVID-19 may not have symptoms while they are infectious. Screening testing in schools may therefore:

- Identify asymptomatic infected staff or students who are infectious, so that they may be sent home.
- Facilitate early case investigation and contact tracing of people infected with SARS-CoV-2 within schools. This may reduce the number of exposed staff and students.
- Provide a means of continually assessing the impact of school protocols designed to reduce the spread of SARS-CoV-2, and to identify potential areas for improvement.

## Who should undergo screening testing?

When a school is open for in-person education, ACPHD recommends the periodic screening testing of all staff working in settings with students to monitor for the presence of asymptomatic staff who are infectious. Students attending in-person education may be screened for SARS-CoV-2 with the consent of their parent or guardian.

It is important to note that IF someone has already tested positive for SARS-CoV-2, *they should not be re-tested as part of a screening protocol for 3 months*. However, if someone who has previously tested positive has symptoms of COVID-19, they should leave school and seek medical evaluation. If COVID-19 is suspected, they would still need to be isolated for at least 10 days from symptom onset.



# How often should staff and students be tested?

ACPHD recommends that teachers and other staff are tested at least once per month. The benefit and ideal frequency of screening testing for staff and students in school settings has not been determined. More frequent screening will detect asymptomatic infections earlier. However, frequent screening is more costly and will result in more potentially disruptive "false positive" test results (i.e. a person gets a positive test result but is not actually infected). For schools and districts considering such expanded screening testing, here are some examples of strategies that could be considered. The examples shown are not an exhaustive list.

#### MINIMUM

Staff: Every month Students: None

nts: Every

ff + Students: ery 2 weeks

aff + Students: Every week Staff + Students: Before opening and then twice weekly

Some schools may consider requiring screening testing staff or students prior to resuming in-person education. While this may identify infected persons, the ideal timing is unclear, and the strategy may provide false reassurance. Staff or students may become infectious after testing negative but before returning to school. Also, both staff and students will likely have ongoing potential exposures to SARS-CoV-2 outside of the school environment after testing.

## What kinds of tests are acceptable?

Several types of tests have received FDA Emergency Use Authorization for SARS-CoV-2 testing. Tests differ in what part of the virus they detect, how a specimen is collected from a person, what kind of lab can run the test, and how fast the results are available. Tests also differ in how "sensitive" they are, meaning how well they identify individuals who are infected with SARS-CoV-2, as well as how "specific" they are, meaning how well they identify people who are not infected. No commercially available SARS-CoV-2 test will always be accurate in identifying who is and is not infected, and all the tests have limitations in identifying people who are infectious to others at time of testing.

- **RT-PCR** and other "molecular" tests are the most sensitive test type and are considered the "gold standard" for diagnosing SARS-CoV-2 infection in clinical settings. However, the sensitivity of molecular tests also means that it is possible for someone to receive a positive test result after they are no longer contagious. This is because these tests can detect particles of virus even when the person has recovered and is no longer able to infect other people.
- Antigen tests and rapid nucleic acid amplification tests (NAATs) are less sensitive but have the advantage of lower cost and rapid turnaround time. A positive test in a person *with COVID-19 symptoms* is likely to indicate that a person is infectious, but an infected person can sometimes get a negative test result. These tests were authorized by the Food and Drug Administration (FDA) ONLY to be used with people with symptoms of COVID-19. The accuracy of these tests for detecting true SARS-CoV-2 infection in people *without symptoms* (e.g. during screening testing) is being studied and currently is not known. Antigen tests have not been authorized by the FDA for use in asymptomatic persons and such use is considered "off-label" (i.e. unauthorized).



If a school is considering using antigen tests or rapid NAATs off-label for screening testing, increasing the frequency of testing may compensate for the decreased sensitivity of these tests (i.e., their decreased ability to correctly identify asymptomatic infected persons). When using these tests for screening testing, positive test results should be confirmed with RT-PCR.

• Some labs may offer **pooled testing**, where a group of specimens (e.g., a cohort of teachers or students at the same school) is analyzed at the same time. If the group tests negative, each individual is considered to be negative. If the group tests positive, all members of the "pool" are isolated while samples are re-analyzed to identify the positive individual(s).

When the prevalence (i.e., number of cases) of SARS-CoV-2 infections in the community is low, "false positive" test results will become more frequent and may require confirmatory testing. Community prevalence of SARS-CoV-2 has been low enough in Alameda County that "false positives" may result in a substantial amount of unnecessary isolation and quarantine (and unneeded disruption to classrooms) depending on the type of test used and the frequency of screening. Confirmatory testing of positives could limit such disruption. If the community prevalence falls to very low levels, ACPHD may advise ending screening testing in schools.

## What testing resources are available?<sup>1</sup>

A list of laboratories from the California Testing Task Force (TTF) is linked <u>here</u>. A screening testing protocol should address the logistics of specimen collection and shipment, in addition to identifying a lab to analyze the specimens. Not all labs will collect the specimens themselves, but they may partner with another agency to provide this service. For staff screening testing, consultation with your employee health plan may be advisable to determine if they will organize and provide the testing.

The first list of options below can be found on the TTF list, and ACPHD has verified that they have testing capacity:

- 1. Exceltox: Jonathan Pittman; jonathan@exceltox.com
- 2. Fulgent: William Pirjamali; wpirjamali@fulgentgenetics.com
- 3. Avellino: Liz Puwal; Liz.Puwal@avellino.com
- 4. SDI: Shanna Waer; <a href="mailto:shanna@sdilabsinc.com">shanna@sdilabsinc.com</a>
- 5. Real Dx Labs: <u>Stephen.agren@realdxlabs.com</u>
- 6. Biocept: Mary Nothum; mnothum@biocept.com
- 7. National Labs: Kira Marquis; kiram@nationallabs.com
- 8. Curative Inc. Laboratory: Chris Erickson; cerickson@gothams.com

Here are some additional options for screening testing:

- 1. <u>CVS Health</u> has been partnering with colleges/universities to do on-site screening testing.
- 2. <u>PMH Laboratory, Inc</u>: Some schools have partnered with this lab. Contact Lindsay M. Gardiner, McGriff Insurance Services: 925.598.2011(o)/503.477.1780(c) or <u>lindsey.gardiner@mcgriff.com</u>

<sup>&</sup>lt;sup>1</sup> Inclusion of laboratories on this list does not constitute an endorsement by ACPHD. The accuracy and performance characteristics of tests performed by these labs has not been independently verified by ACPHD.



- 3. School-Based Health Centers (SBHC): If your school has a SBHC, you may be able to partner with them to design and implement a screening testing protocol.
- 4. Stanford Health Care Clinical Lab: Schools may use Stanford's testing sites or receive training to collect their own specimens and submit for testing. Complete an intake questionnaire <u>here</u>.
- 5. <u>Mirimus</u>: Offers pooled saliva-based RT-PCR testing. Contact Ethan Summer: <u>sommer@mirimus.com</u>
- 6. <u>Pixel by LabCorp</u> Home Collection Kit: Nasal swab self-collection at home with 24- to 48-hour turnaround time *once received in lab*. Insurance information can be entered at checkout.

ACPHD is not currently providing testing resources directly to schools and districts for screening testing. However, the Alameda County Office of Education has a contract with a testing provider to support screening testing for staff of certain schools. In addition, teachers and school staff are considered essential workers in California, and screening testing is required to be covered by commercial insurers for such workers, currently without a limit on frequency. Additional state or federal resources for school testing may become available in the future.

## What questions should you ask a potential screening testing provider?

- Which test(s) will you use? Any test with an FDA Emergency Use Authorization (EUA) is acceptable. This does NOT include antibody (serologic) tests.
- How many samples can you collect each day? This will vary depending on the type of test, resources available and testing provider. Screening everyone on a single day may be a challenge for some testing companies at larger schools.
- What kind of support from school staff will be required on screening days?
  Find out if a company will need someone from the school full-time to support the testers on screening days.
- 4. What is the turnaround time?

Faster turnaround times make it less likely that someone infected with SARS-CoV-2 remains in the school community while contagious. Rapid tests provide results in about 15 minutes. If using a PCR test, turnaround times should ideally be less than 24 hours but no more than 48-72 hours.

5. What will be the cost?

There is a wide range of costs depending on the type of test and related services being offered. Ideally, your contracting laboratory will have the capacity to bill insurance directly and accept reimbursement as payment in full (i.e. no co-pays). Make sure to ask any labs you speak with what their experience has been with being able to bill successfully for staff and/or student testing and at what frequency.



6. Is pooled testing an option?

Pooled testing is one way to lower costs and increase testing capacity, since one test can be run in place of several. However, if the pooled sample is positive, additional tests must be run.

- 7. Are you familiar with the requirements for reporting test results to ACPHD? Reporting requirements for Alameda County can be found <u>here</u>. Laboratories must report positive and negative results to ACPHD within 8 hours. Healthcare providers must submit a Confidential Morbidity Report (CMR) for laboratory-confirmed cases to ACPHD within 24 hours.
- 8. How are you storing staff and student data to ensure privacy? How will you share test results with the school?

Ask the lab whether the database it uses to store staff and student contact information along with test results is "HIPAA-compliant". This means that their data system meets strict standards for privacy protection. It is also important to understand how the lab will share test results with the school and whether it will provide you with a list of individuals with positive test results only.

- 9. How many languages are your printed materials available in, and do you offer the option to translate them into additional languages? Also, when contacting families with a positive test result, do you offer a language line or other option for communication with non-English speaking families? If the testing company cannot meet your language needs, ensure that they will allow you to translate the materials, such as consent forms, through your own channels, as well as utilize any language line that your school already works with.
- 10. How are staff, teachers and families given negative test results?If the only option for getting negative test results is online, this may not be the best fit if your school serves families who may not have internet access at home.
- 11. What kind of termination clause will be included in the contract? Most contracts have a clause that allows either party to terminate the contract with 30 days written notice for any reason. Make sure that a termination clause is included in any testing agreement you sign.