VDH COVID-19 MOLECULAR TESTING ALGORITHM

Does the patient have symptoms* consistent with COVID-19?

TEST POSITIVE

If any of these describe the patient:
- Pregnant and presenting in labor
- Neonates born to women with confirmed or suspected COVID-19
- Undergoing aerosol-generating procedures with limited PPE at the facility (if testing, test within 48 hours of procedure)
- Undergoing major time-sensitive surgeries (if testing, test within 48 hours of surgery)
- Immunocompromised person being admitted to the hospital
- Undergoing immunosuppressive procedures

TEST NEGATIVE

Consider testing†

TEST POSITIVE

Test for COVID-19^ a

TEST NEGATIVE

Consider testing†

TEST POSITIVE

Refer to VDH Healthcare Personnel Guidance to assess and manage exposed, asymptomatic healthcare personnel

TEST NEGATIVE

See specific setting guidance (nursing home, assisted living facility, correctional facility, etc.)

Any other asymptomatic person who is tested with a molecular test without close contact‡ to a known COVID-19 case

TEST POSITIVE

Any other asymptomatic person who is tested with a molecular test without close contact‡ to a known COVID-19 case

TEST NEGATIVE

See Box A

See Box B

Recommendation:
- For healthcare providers to understand who to test and what recommendations to provide based on the results
- For COVID-19 patients may present with a variety of symptoms.
- If any of these describe the patient:
  - Pregnant and presenting in labor
  - Neonates born to women with confirmed or suspected COVID-19
  - Undergoing aerosol-generating procedures with limited PPE at the facility (if testing, test within 48 hours of procedure)
  - Undergoing major time-sensitive surgeries (if testing, test within 48 hours of surgery)
  - Immunocompromised person being admitted to the hospital
  - Undergoing immunosuppressive procedures

Recommendations are based on CDC guidance, VDH Guidance, and Infectious Diseases Society of America Guidelines on the Diagnosis of COVID-19.

† For known specimen collection locations in Virginia, see here. Serology testing can be used for public health surveillance or research purposes, but is not recommended for diagnosing current COVID-19 infection or making decisions about returning to work. All COVID-19 test results (positive and negative) must be reported to VDH within 24 hours.

‡ If there is a known exposure, it is reasonable to test 5 days or more after exposure based on the average incubation period and available evidence to date. If testing is not readily available for all close contacts, prioritize symptomatic close contacts or those at increased risk for severe COVID-19.

§ VDH recommends that the person quarantine (stay home) for 14 days after last exposure. If the person is not able to quarantine for the full 14 days after exposure and does not have symptoms, counting the date of last exposure as Day 0, quarantine may end after Day 10 with no test or after Day 7 with a negative PCR or antigen test performed on or after Day 5. If the person does not quarantine for the recommended 14 days, the person should continue monitoring symptoms and follow all recommendations for the full 14-day period after last exposure. If the person did not have a known exposure to someone with COVID-19, the person should isolate until at least 24 hours after symptoms resolve (if symptomatic) or follow protective measures in place in the community (if asymptomatic).

‡ For COVID-19, VDH defines close contact as being within six feet of someone known to have COVID-19 for a total of 15 minutes or longer over a 24-hour period, or having exposure to respiratory secretions from an infected person (e.g., being coughed on or sneezed on, sharing a drinking glass or utensils, kissing), starting from two days before the person became sick (or two days before specimen collection if asymptomatic) until the person was isolated.

† A negative molecular test result for SARS-CoV-2 means that at the time of collection, RNA from this virus was not present in the specimen above the limit of detection.
VDH COVID-19 ANTIGEN TESTING ALGORITHM

For healthcare providers to understand who to test and what recommendations to provide based on the results

December 14, 2020

Does the patient have symptoms* consistent with COVID-19?

YES

Test using ANTIGEN*. If results are not provided at point-of-care, patient should isolate.

- Indicates current infection†
- Patient should isolate until no longer infectious and close contacts should quarantine§
- If admitted to a healthcare facility, use transmission-based precautions
- Follow situation-specific patient management (e.g., delay major surgeries, if possible)

- Indicates no antigens were detected; however, amount of antigen in a sample decreases as duration of illness increases, particularly 5 days after onset of illness.
- Confirm negative antigen result with a molecular test^ done in a high-complexity CLIA certified laboratory. Patient should isolate while awaiting confirmatory test result.
- If molecular testing is not available, clinical discretion can be used in whether to recommend the patient isolate.
- Patient with positive confirmatory test should isolate until no longer infectious and close contacts should quarantine§
- Patient with negative confirmatory test should isolate based on exposure and symptoms.§

NO

Test using ANTIGEN if molecular testing (e.g., PCR) unavailable†

TEST POSITIVE

- Indicates presumptive current infection
- Patient should isolate while awaiting confirmatory test result
- Confirm positive result with a molecular test done in a high complexity CLIA certified laboratory
- Patient with positive confirmatory test should isolate until no longer infectious and close contacts should quarantine§
- Patient with negative confirmatory test and no known exposures should follow preventative measures.§

TEST NEGATIVE

- Indicates no antigens were detected
- Patient should remain in quarantine for 14 days after the last date of exposure until indicated§
- Perform molecular test if symptoms develop

If this describes the patient:
- A close contact‡ of a person with lab-confirmed COVID-19 or person at higher risk because of activities where could not distance as needed (e.g., travel, large gathering, crowded indoor setting)

Residents and/or staff of congregate settings

Any other asymptomatic person who is tested with an ANTIGEN test without close contact‡ to a known COVID-19 case

If this describes the patient:

If this describes the patient:

See CDC Nursing Home Guidance

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Recommendations are based on CDC guidance, VDH Guidance, Infectious Diseases Society of America Guidelines on the Diagnosis of COVID-19, APHL’s Considerations for Implementation of SARS-CoV-2 Rapid Antigen Testing, current FDA Emergency Use Authorizations for available tests, and FDA FAQ.

* COVID-19 patients may present with a variety of symptoms.
† Point-of-care (POC) tests must be performed at a CLIA-certified laboratory or testing site. More information can be found on the VDH Office of Licensure and Certification website. All results (positive and negative) must be reported to VDH within 24 hours. If there is a known exposure, it is reasonable to test 5 days or more after exposure based on the average incubation period and available evidence to date. If testing is not readily available, prioritize symptomatic individuals and asymptomatic close contacts at increased risk for severe COVID-19
‡ False positives can occur, especially in low prevalence populations.
§ When confirming an antigen test result with a PCR test, the confirmatory PCR test should be performed in a high complexity CLIA certified laboratory. The follow-up specimen should be collected within 24 hours of the original test, if possible, and no more than 48 hours after the antigen test. Specimens collected more than 48 hours after the initial test may lead to discordant results.
^ VDH recommends that the person quarantine (stay home) for 14 days after last exposure. If the person is not able to quarantine for the full 14 days after exposure and does not have symptoms, counting the date of last exposure as Day 0, quarantine may end after Day 10 with no test or after Day 7 with a negative PCR or antigen test performed on or after Day 5. If the person does not quarantine for the recommended 14 days, the person should continue monitoring symptoms and follow all recommendations for the full 14-day period after last exposure. If the person did not have a known exposure to someone with COVID-19, the person should isolate until at least 24 hours after symptoms resolve (if symptomatic) or follow protective measures in place in the community (if asymptomatic).
‡ For COVID-19, VDH defines close contact as being within six feet of someone known to have COVID-19 for a total of 15 minutes or longer over a 24-hour period, or having exposure to respiratory secretions from an infected person (e.g., being coughed or sneezed on, sharing a drinking glass or utensils, kissing), starting from two days before the person became sick (or two days before specimen collection if asymptomatic) until the person was isolated.