TESTING

Table 6.2 Overview of Test Types for COVID-19

	Viral Tests				Antibody (Serology) Test
	RT-PCR Viral Test (Quest)	Rapid NAAT Viral Tests (ID Now)	Rapid Antigen Viral Test (Sofia-2)	Culture	
How is the sample taken?	• Respiratory specimen (nasal, NP, OP swab) • Sputum or saliva	• Respiratory specimen (nasal, NP, OP swab)		• Respiratory specimen	• Finger stick or blood draw
What does it test?	• Diagnose active COVID-19 infection by detecting viral genetic material (RNA)		• Diagnose COVID-19 infection by detecting viral proteins	• Detects live virus capable of growing in vitro	• Detects the presence of antibodies (proteins made in response to infections) in blood
How are the results used?	• Identify people with active SARS-CoV-2 infection in order to minimize transmission through isolation and provide medical monitoring • See Table 6.3 for applications in symptomatic and asymptomatic persons			• Identify patients with repeat positive RT-PCR results who are infectious	• Shows past COVID-19 infection • Should not be used at this time to determine if an individual is immune or protected from reinfection
Where is the test performed?	• In a laboratory setting	• At or near the POC		• In a public health biosafety lab	• Some are performed in a laboratory; others are performed as POC
What are the performance characteristics?	• RT-PCR tests are highly sensitive and specific • Sensitivity >90% • Specificity >99%	• Rapid tests are generally less sensitive and more likely to miss a current infection than laboratory-based tests • Specificity of rapid tests is comparable to that of laboratory-based tests		• Highly specific • Less sensitive compared with RT-PCR	• Sensitivity and specificity vary based on the specific test • No antibody tests can indicate current infection
How long does it take to get results?	• 1 to 3 days	• 15 minutes for most rapid tests		• Days to weeks • Results are not intended for clinical decision-making	• Minutes, up to 3 days if performed in a laboratory

NAAT = Nucleic Acid Amplification Test NP = Nasopharyngeal OP = Oropharyngeal POC = Point of Care

Excerpted from the Testing section of the CCHCS Interim Guidance for Health Care and Public Health Providers: https://cchcs.ca.gov/covid-19-interim-guidance/

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