

COVID-19 PCR and Antibody Testing Public Health Response Recommendations – ver 2.0, May 8, 2020

These recommendations are based on what is known currently about the diagnostic utility of PCR (molecular) testing and the large amount of uncertainty about the quality of any individual serologic test type and the unknown timing of COVID antibody development or duration. They represent a conservative approach recognizing the current importance of identifying people during their infectious period so that they can be isolated and their contacts quarantined to reduce transmission. This guidance will change as we learn more about antibody responses to COVID.

SARS-CoV-2 PCR		Antibody			Interpretation	Public Health Response
Positive	Negative	IgM	IgG	Total Ig		
For patient with nasal swabs and blood draw done at the same time						
	X	Negative antibody results			Uninfected, susceptible or incubating infection	No follow-up necessary
X		Regardless of antibody results			Confirmed early infection	Follow-up per current protocols for confirmed cases: <ul style="list-style-type: none"> • obtain symptom information and hospitalization status • institute isolation based on PCR result • identify contacts, quarantine contacts for 14 days from last exposure
For patients with nasal swab not done or done at some point prior to blood draw						
Unknown, Currently or Previously PCR Negative		+	- Or unknown		Probable recent infection	Follow-up protocol: <ul style="list-style-type: none"> • obtain symptom information and hospitalization status • refer individual for NP, nasal or oral swab, or sputum (if it wasn't collected concurrently) for PCR test, individual isolates or quarantines pending test result • if recently appropriately* symptomatic and PCR positive, base isolation period off of symptom onset (10 days plus at least 3 days fever free and improvement in respiratory symptoms) • if asymptomatic or non-COVID like symptoms and PCR positive, base isolation period off of positive test date (10 days from specimen collection) • if PCR negative, isolation period not indicated • identify contacts with exposure to case through end of isolation period and institute 14-day quarantine as appropriate
		+	+		Probable recent or resolving infection	
		- Or unknown	+		Probable resolving or resolved infection	
					+	
Previously PCR Positive		+	-		Confirmed infection at time indicated by PCR result	No additional follow-up needed assuming appropriate follow-up done associated with original PCR positive
		+	+			
		-	+			
				+		

*Appropriately symptomatic is defined as: either cough or shortness of breath, OR at least two of the following symptoms – fever, chills, shaking chills, headache, myalgia, sore throat and new loss of taste or smell