2020 Overarching Jurisdictional SARS-COV-2 Testing Strategy

Jurisdiction:	Nevada
Population Size:	3,160,965

1. Describe the overarching testing strategy in your state or jurisdiction.

Nevada is currently testing at or above 2% of our population. As of June 10th, Nevada has completed 215,087 PCR tests. There have been 10,164 confirmed cases and 448 deaths statewide. Each local jurisdiction is required to maintain at least 2% of population testing for their service areas and increase as needed over time. Nevada's public health laboratories use both a mid-throughput testing and the Hologic Panther high throughput. This testing technology is not only capable of rapid testing at a lab site, but also uses collection kits and is best suited for use with outbreak analyses and testing of large facilities where several tests need to be performed at once such as prisons and skilled nursing facilities. Nevada is currently using our public health laboratories, hospital laboratories and commercial laboratories to perform SARS-CoV-2 testing. Plans have been developed to rapidly scale testing to meet increased demand including point-of-care and rapid result testing.

Nevada will continue to increase non-traditional laboratory site testing and has provided testing at residential medical facilities, community centers, casinos, and homeless encampments. The local health authorities will increase community mobile testing at sites such as grocery stores, pharmacies, and food distribution centers.

Nevada has done minimal serology testing to date but will move into more antibody testing in the next coming months.

Nevada's State Public Health Laboratory's Director, Dr. Pandori has been appointed by Nevada's Governor to serve as Nevada's Testing Chief. Dr. Pandori will work with the local health departments and the State public health on increasing communication and collaboration between all jurisdictions. Currently each local health department and the laboratories staff participate in no less than weekly update calls.

Table #1a: Number of individuals planned to be tested, by month

BY MONTH:	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	TOTAL
Diagnostics*	1,014,310	113,674	107,000	107,000	105,000	107,000	105,000	107,000	1,765,984
Serology	0	5,000	10,000	13,000	16,000	18,000	23,000	26,000	111,000
TOTAL	1,014,310	118,674	117,000	120,000	121,000	125,000	128,000	133,000	

^{*}Each jurisdiction is expected to expand testing to reach a minimum of 2% of the jurisdictional population.

Table #1b: Planned expansion of testing jurisdiction-wide

Name of testing entity	Testing venue (select from drop down)	Performing Lab (if different from testing entity)	Daily diagnostic through-put	Daily serologic through-put	Specific at-risk populations targeted (list all)
Southern Nevada Public Health Laboratory	Public health lab		2,000	1,000	elderly, HIV Positive, nursing homes, prisons, minorities, homeless
University Medical Center	Commercial or private lab				Elderly, High-Risk populations, Front line workers
Southern Nevada Health Clinic	Federally Qualified Health Center	Southern Nevada Public Health Lab			Ethnic minorities, disabled, elderly, public

Name of testing entity	Testing venue (select from drop down)	Performing Lab (if different from testing entity)	Daily diagnostic through-put	Daily serologic through-put	Specific at-risk populations targeted (list all)
Carson City Health and Human Sevices	Drive-thru testing site	Nevada State Public Health Laboratory			Elderly, disable, nursing homes, congregate living settings, healthcare workers, person experiencing homelessness
Carson City Health and Human Sevices	Community-based	Nevada State Public Health Laboratory			Elderly, disable, nursing homes, congregate living settings, healthcare workers, person experiencing homelessness
Carson Tahoe Regional Health Care	Hospitals or clinical facility				Community, healthcare workers
South Lyon Medical Center	Hospitals or clinical facility				Community, healthcare workers
Carson Valley Medical Center	Hospitals or clinical facility				Community, healthcare workers
Tribal Clinics	Hospitals or clinical facility				Community, healthcare workers
Private Health Care Providers	Hospitals or clinical facility				Community, healthcare workers
Washoe County Livestock Event Center	Drive-thru testing site	Nevada State Public Health Laboratory	900		All community members volunteering to be tested to include high-risk populations up to 900 tests per day. This testing event will be

Name of testing entity	Testing venue (select from drop down)	Performing Lab (if different from testing entity)	Daily diagnostic through-put	Daily serologic through-put	Specific at-risk populations targeted (list all)
					held for 6 days starting May 30 through June 5, 2020.
Nevada Public and Behavioral Health Community Health Nursing	Community-based	Nevada State Public Health Laboratory	100	67	Rural and Frontier community members, ethnic minority, poverty line or homeless, elderly, disabled, nursing homes, other congregate living settings.
Nevada State Public Health Laboratory	Public health lab		1,500	500	Prisons, skilled nursing facilities, nursing homes, other congregate living settings, minorities, healthcare workers, homeless.
Quest	Commercial or private lab		300	100	Elderly, disable, nursing homes, congregate living settings, healthcare workers
LabCorp	Commercial or private lab		200	125	Elderly, disable, nursing homes, congregate living settings, healthcare workers
Clinical Pathology Laboratory	Commercial or private lab		200		Elderly, disable, nursing homes, congregate living settings, healthcare workers

2020 Direct Expansion of SARS-COV-2 Testing by Health Departments

2. Describe your public health department's direct impact on testing expansion in your jurisdiction.

Nevada's COVID testing has greatly expanded over the past two months with the re-opening phases released through the Governor. Casino's are testing all of their employees, local health authorities are providing facility and drive through testing and laboratories have expanded their testing capacity to meet and exceed the required 2% testing for Nevada's population.

Currently the most prevalent barriers Nevada is experiencing are staffing to handle the surge in testing and some refusing to be tested. The latter will be addressed through community education stressing the need for ongoing statewide testing as businesses reopen and people head back to work. Staffing issues will be covered once we have hired additional staff over the next couple of months. NV ELC has contracted with Nevada Broadcaster's Association to provide statewide Public Service Announcements on not only mitigation of spread of COVID-19 and other communicable diseases but information on available testing locations and where to access services. These PSA's will be broadcast on tv and radio on both English and Spanish media platforms to assist in reaching minority populations in both our urban areas as well as rural and frontier.

The Nevada State Public Health Laboratory Director has been assigned by the Governor to serve as the State's Testing Chief. In this role he is to provide statewide oversight of laboratory capacity for all laboratories performing COVID-19 testing. Each laboratory providing testing in Nevada works together with the Nevada State Public Health Laboratory on testing and supplies. This provides a platform to prevent over capacity (bottle neck) of tests in one lab as the Chief can work with other laboratories to assist with distribution of tests to handle the immediate need. This platform will enable collaboration across jurisdictions to address the expanded need in the Fall and Winter months where flu will add to the laboratory and epidemiology workload. Once Nevada moves to increased serology testing, assay testing will be used to determine the degree of antibodies to assess the immunity level in each specimen. As more research emerges, consideration of quick lateral flow EIA test kits will be reexamined to determine if this method will be suitable to public health use.

The Nevada State Public Health Laboratories and Local Health Authorities across Nevada have been utilizing the National Guard to provide assistance with multiple COVID-19 related activities to include sample collection, lab testing, and contact tracing. Currently the Nevada State Public Health Laboratory is using 15 National Guard and the local health authorities also are using National Guard to staff their call centers and assist with contact tracing. With the Enhancing Detection funding, and contracting with SalesForce and Deloitte, we will be able to handle increased monitoring even when the National Guard is called back.

NV ELC is working with InductiveHealth Informatics to automate CSV laboratory reporting in to NBS so all labs across Nevada are reporting in a machine-readable format. Our ELR Coordinator, Business Process Analyst, and epidemiology staff review data from NBS and TriSano daily to identify COVID activity and prevalence across Nevada.

NV ELC has developed contracts with the Nevada System of Higher Education to work with both universities in Las Vegas and Reno to develop training providing collegiate level classes specific in these topics as well as online training for quick employment for new contact tracers as well as develop surge staffing strike teams to deploy to hot spot locations across the state. This strike team will also be able to deploy to other states, if needed. The local health authorities have also developed strike teams to mobilize testing for nursing homes or residents that are unable to travel to a testing location. Rapid testing equipment will be used on mobile units and deployed out to hot spots identified by Epidemiology reports received daily through the Division of Public and Behavioral Health to identify where COVID appears most prevalent in the community. Mobile testing or drive through testing will be planned and deployed to these areas.

The Nevada Medical Officer has enacted a requirement for testing of all long-term care facilities, nursing homes, et.al where all residents and staff must be tested no less than weekly. Partnerships with rural and frontier health clinics, hospitals and community-based nursing to facilitate outreach to Nevada's expansive remote communities to promote education awareness and testing for these residents. This also includes most of our tribal populations as they are nearly all in frontier communities. The local health jurisdictions will deploy testing teams out to homeless camps and locations where Nevada's homeless population gathers to provide education and rapid testing to our displaced residents.

Nevada is assessing seroprevalence through contracts with our rural and frontier community partners, our health facility partners, including FQHC's, and our local health departments who are providing local testing at their facilities as well as drive through testing; testing sites include but not limited to community centers, high schools, casinos and hotels, and mobile testing vans. NV ELC will continue to work with community partners to create local events to promote testing.

None of these enhanced activities would be possible without the support of the Enhancing Detection Project funding.

Table #2: Planned expansion of testing driven by public health departments

BY MONTH:	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	TOTAL
Number of additional* staff to meet planned testing levels	0	14	9	8	7	6	6	6	56
				FOR DIAGNO	STIC TESTING				
How many additional* testing equipment/ devices are needed to meet planned testing levels? (provide an estimated number, and include platform details in narrative above)	0	2	2	2	2	0	0	0	8

BY MONTH:	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	TOTAL
Volume of additional swabs needed to meet planned testing levels++	0++	2,000	monthly: 39,000 swabs for kits, 45,000 Hologic multiswabs	monthly: 45,000 swabs for kits, 45,000 Hologic multiswabs	monthly: 49,000 swabs for kits, 45,000 Hologic multiswabs	monthly: 65,000 swabs for kits, 45,000 Hologic multiswabs	monthly: 75,000 swabs for kits, 45,000 Hologic multiswabs	monthly: 85,000 swabs for kits, 45,000 Hologic multiswabs	2,000
Volume of additional media (VTM, MTM, saline, etc.) needed to meet planned testing levels**	0++	1,000	38,000	42,000	44,000	50,000	55,000	75,000	305,000

BY MONTH:	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	TOTAL
Volume of additional reagents needed to meet planned testing levels, by testing unit and platform (i.e. 100K/day - Hologic panther; 100k/day - Thermofish er)	4000/day - Hologic; 5000/per day - Panther	5000/day Panther; 12000/day Hologic	5000/day Panther; 11000/day PCR; 1500/day Hologic	10000/day Panther; 11000/day PCR; 1500/day Hologic	1200/day Panther; 13000/day PCR; 1500/day Hologic	15000/day Panther; 16000/day PCR; 1500/day Hologic	18000/day Panther; 21000/day PCR; 1500/day Hologic	2000/day Panther; 26000/day PCR; 1500/day Hologic	
				FOR SEROLO	GIC TESTING				
Number of additional* equipment and devices to meet planned testing levels		4x Rapid Testing 4x Point of Care Testing 1x Quant Studio Dx	1	0	0	0	0	0	1

BY MONTH:	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	TOTAL
		1x Cepheid GenExpert							
		1x Abbott ID Now							
		1x Ultra Low Freezer							
		1x -20 Freezer							
		1x Refrigerato r							
Volume of additional reagents needed to meet planned testing levels, by testing unit and platform (i.e. 100K/day - Hologic		10,000/day - BioRad; 500/day Abbott IgG							

BY MONTH:	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	TOTAL
panther; 100k/day - Thermofish er)									

^{*} Report new monthly additions only, not cumulative levels

⁺⁺ For May and June, only include needs beyond the supplies provided by FEMA. Report new monthly additions only, not cumulative levels.