Southern Nevada Public Health Laboratory

Client Services Manual

05.2022

Southern Nevada Public Health Laboratory

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(See appendix A for an alphabetical list of all tests)

SNPHL CONTACT INFORMATION

ADDRESS, PHONE, FAX

Southern Nevada Public Health Laboratory (SNPHL)
700 S Martin Luther King Blvd.
Las Vegas, Nevada 89106

Phone: 702 759 1020 or Clinical Laboratory 702 759 1140
24 Hour Phone: 702 336 8363
Fax: 702 759 1444

AFTER HOURS EMERGENCY CONTACT INFORMATION

SNPHL laboratory contact

On-call lab personnel (24/7 access)	702 336 8363

Nevada State Public Health Laboratory emergency contact

Emergency Response coordinator	775 682 6236

SNPHL KEY PERSONNEL

Laboratory Director:	Horng-Yuan Kan, PhD HCLD (ABB)	702 759 1113
Laboratory Manager:	Vacant	702 759 1365
Microbiology Supervisor: Michael Picker, PhD, MB (ASCP) [CM]		702 759 1022
Molecular Supervisor: Erin Buttery, MBA, MLS (ASCP) [CM]		702 759 1367
Immunology Supervisor: Nicholas Gabler, MT (AMT)		702 729 0977
COVID Supervisor: Sui Ching Phung, PhD		702 759 1753
LRN Responsible Official: William Bendik, MPH MT (ASCP) [CM]		702 759 1026
Biosafety Officer: Anna Angeles, MD MT		702 759 1226
QA Analyst: Renee Fejeran, MS-IHCM MLS (ASCP) [CM]		702 759 1644
Lab Administrative Coordinator: Betty Souza-Lui		702 759 1245

BUSINESS HOURS

8 am – 4:30 pm Monday through Friday
The laboratory observes official Southern Nevada Health District holidays
For hours the laboratory is closed, SNPHL maintains a standby call service to monitor calls.
through phone service and a secure website which will respond for information and emergencies.

If required, the laboratory will provide service after hours at the discretion of the Lab Director.

SPECIMEN DELIVERY

Specimens are accepted via Courier Service or Federal Express, Monday – Friday.
If other than courier service is required, contact the lab.

Southern Nevada Public Health Laboratory

General Information

MISSION
The protection of the safety and well-being of Southern Nevada citizens and visitors shall be the mission of the District in developing and operating the Southern Nevada Public Health Laboratory (SNPHL).

OBJECTIVES
The following priorities will serve as the objectives for the SNPHL:

- The provision of rapid, thorough and quality analyses of specimens related to an actual or suspected bioterrorism event
- The provision of laboratory support for the assessment, investigation, prompt diagnosis and control of communicable disease outbreaks
- The collection and analysis of data to rapidly identify emerging disease
- The provision of timely, quality testing results in support of other core public health functions such as food-borne disease investigations
- The SNPHL shall provide data to SNHD Epidemiology, SNHD IT Informatics department, and for reference and surveillance of disease and contaminants
- The SNPHL may research the nature, cause, diagnosis, and control of disease
- The SNPHL shall work together with the District and other local health care providers to protect the public's health
- The SNPHL shall provide backup support to the Nevada State public health laboratory in Reno, NV

HISTORY

In 2002, the Southern Nevada Health District and the State of Nevada recognized that Las Vegas was the only major metropolitan area in the United States (U.S.) without the availability of a public health laboratory within 100 miles. Because Las Vegas had been identified by the federal government as one of the prime targets for bioterrorist activities, the availability of public health laboratory services was determined to be an integral component of core public health and law enforcement activities.

In addition to suspect bioterrorism agent analysis, other public health laboratory matters (such as sexually transmitted diseases, foodborne outbreak investigations, surveillance of infectious/communicable diseases, emerging pathogen analysis, and coordination with multiple state and federal laboratory partners) necessitated additional services.

The Southern Nevada Public Health Laboratory has since evolved into a system of multiple laboratories providing public health and clinical services to all locations of the Health District. The laboratory system is Clinical Laboratory Improvement Amendments (CLIA) certified and licensed by the State of Nevada to perform high complexity testing. It is owned and managed by the Health District.

Our Clients

Primary users of the laboratories include the Southern Nevada Health District Clinical Services Division, SNHD Office of Epidemiology and Disease Surveillance, sentinel laboratories seeking reference or consultation services.

Laboratory Services

The laboratories are engaged in activities designed to aid in the diagnosis, treatment and prevention of communicable diseases and to assess the general health of the population. The laboratories provide diagnostic and follow-up services in the areas or surveillance studies of etiologic agents in the areas of bacteriology, virology and serology.

The public health laboratory provides hospitals, clinics and commercial laboratories with a wide range of services including identification and confirmation of unknown pathogenic organisms, focal point for coordinating investigations of infectious disease outbreaks and mediating the transfer of information between agencies. The staff performs testing for sexually transmitted diseases, enteric, and microbial identification.

Response to Biological Terrorism

SNPHL participates in Laboratory Response Network (LRN) initiated by the Centers for Disease Control and Prevention (CDC), Atlanta. The LRN is a collaborative approach between public and private laboratories and is focused heavily on improving laboratory-based bioterrorism and chemical terrorism response capabilities in the United States.

SNPHL ORGANIZATION

The Southern Nevada Public Health Laboratory(SNPHL) is comprised of four departments, each of which reports to the Laboratory Manager, who in turn reports to the Laboratory Director. The Laboratory Director reports to the Community Health Services Division Director. The departments that comprise SNPHL are the Immunology/Serology Department, Microbiology Department, Molecular Department and the COVID Department.

Immunology/Serology Department

The Immunology/Serology section of SNPHL performs a full range of testing for a wide variety of infectious diseases. Works with the Southern Nevada Health District (SNHD) Clinical Services Division, the Office of Epidemiology and Disease Surveillance (OEDS) and other community partners. By analyzing clinical samples, this department assists in activities pertaining to Southern Nevada's surveillance, disease management and delivery of clinical testing services. The following services are offered routinely:

- Syphilis testing performed following the reverse CDC algorithm with RPR testing with TP-PA confirmation
- Hepatitis testing, including Hepatitis A, B and C
- QuantiFERON testing for latent TB
- HIV antigen/antibody, confirmation and viral load
- NAAT testing for Chlamydia trachomatis, Neisseria gonorrhea, SARS-CoV-2
- SARS-CoV-2 Antibody

Microbiology Department

The Microbiology section of SNPHL uses the latest methods to isolate, identify and characterize pathogens. Works with the SNHD OEDS, SNHD Environmental Health (EH) Division, government agencies, and hospital sentinel laboratories. They analyze clinical, environmental samples and participate in the core activities of Southern Nevada surveillance, quality assessment, assurance and safety. Some of the services offered in Microbiology Department are:

- Culture of stools for fecal pathogens and confirmation of STEC broth
- Culture of clinical specimens for uncommon pathogens
- Identification of difficult to identify isolates by 16S Ribosomal rDNA sequencing
- Confirmation of vancomycin resistant or intermediate Staphylococcus aureus (VRSA/VISA)
- Confirmation of suspect agents of bioterrorism

Molecular Department

The Molecular Department has a range of polymerase chain reaction (PCR) tests for a variety of infectious diseases. These tests use real-time PCR assay that target the DNA or RNA of a variety of bacteria such as Brucella and viruses such as influenza. Some of the services offered in the Molecular department includes:

- Surveillance for respiratory pathogens
- Gastrointestinal pathogens identification
- Surveillance of vaccine preventable diseases
- Surveillance of vector-borne diseases
- Perform testing for suspected bioterrorism incidents

COVID Department

The COVID section of SNPHL works with SNHD OEDS to perform SARS-CoV-2 testing for Southern Nevada residents. Provide fast and accurate reports to the Office of Epidemiology for quick response to the pandemic.

ORDERING SUPPLIES

The laboratory provides some supplies to clients collecting samples to be analyzed at the Southern Nevada Public Health Laboratory. Supplies include:

1. Laboratory Test Requisition
2. Biohazard bags with absorbent (can be ordered via supply warehouse**)**
3. Other- contact laboratory for other supplies

REQUISITIONS

The requisition serves as a primary information source from the client or physician to the laboratory providing important information regarding the patient and the specimen as well as the ordering facility. Contact SNPHL for the appropriate requisition.

It is imperative that the requisition is completed with as much information as possible to expedite testing and reporting of patient results.

General Information

The date of specimen collection is required on the requisition form.
The time of specimen collection is required on the requisition form.

Patient Information

The minimum required patient information must include:

Full legal name (first and last, include middle initial if known)
Unique patient identifier (if available)
Date of birth
Gender
Unique sample identifier, if available (for example: HIV bubble number or sample accession number)

Facility Information
Must include:
Facility Name
Street Address
City, State and Zip code
Facility Phone number
Facility Fax number

Test(s) Requested
Must include:
Specimen Type (Code)
Specimen Source, if applicable
Test(s) Requested

When assistance is requested for organism identification or confirmation, information should be provided regarding organism characteristics and specific test methodologies, including CIDT manufacturers.

Test Requisitions also available on SNHD Website
SNPHL Request Forms

Electronic Requisitions

Some external and internal clients may have access to request testing via an Application or online web-portal in lieu of the standard test requisition form. Requests made for testing in this manner follow the same criteria as for a "paper" or offline requisition. All elements of an electronic request must be present and accessible in the system, and failure to provide the required information can result in cancellation of the requested test by SNPHL staff.
Guidelines for use of the electronic application can be found in Appendix J.

SPECIMEN COLLECTION

The accuracy of any test procedure is dependent on the quality of the specimen. The quality of the specimen is dependent on how and when it was collected, the care given to its preservation, and how soon it reaches the laboratory.

The following information should serve as a guideline when ordering laboratory tests, preparing patients, collecting patient samples and transporting specimens to the laboratory. The Test Directory provides a complete list of tests offered by the laboratory including specific collection instructions.

The following recommendations are to be used as guidelines for collecting reliable specimens:

Before specimen collection:

- Review the specimen requirements for the test in the SNPHL Test Directory
- Note type of specimen to be collected and required volume or amount
- Identify specific collection materials
- Note any special instructions
- Check storage and handling requirements

- Prepare patient in advance with appropriate collection instructions and any other information such as the timing of collection, special diet, need for medical history, etc.

SPECIMEN LABELING

Proper identification of the patient and the specimen(s) collected is extremely critical. If possible, verbally verify the patient's full name before collecting the specimen. Clearly label each specimen with the patient's full name, date of birth, unique identification number as well as the date of collection. If specimen is for culture, include the source on the label. The name or identification number on the lab requisition form must exactly match the patient's name or identification number on the specimen(s) submitted. Verify that the lab requisition matches the specimen(s) and has been completed with all the required information.

BLOOD SPECIMEN COLLECTION

There are two types of collection tubes which may be used for the collection of blood. Those which contain anticoagulants and preservatives and those who do not. Check the preferred specimen requirement in the Test Directory to determine what type of collection tube is considered optimal for the test that is requested and the required specimen volume. Contact the laboratory if you have any questions on the volume requirement. To ensure accurate test results, follow the "New Order of Draw" (based on CLSI standard H3-A5, revised 2003 – see appendix). Draws conducted in this order prevent additive carryover and erroneous results. Allow all tubes to fill completely. Attempts to force more blood into the tube by exerting pressure will result in damage to the red cells (hemolysis). Gently invert each tube containing a preservative as soon as it is drawn, about five times, to ensure adequate mixing of blood with the anticoagulant. Verify the tube has been clearly labeled with the patient's name or identification number and date.

Hemolysis occurs when the red cells rupture, and hemoglobin and other intracellular components spill into the serum or plasma. Hemolysis can be caused by rough handling of a blood specimen, dilution, exposure to contaminants, extremes in temperature or pathologic conditions. In general, grossly or moderately hemolyzed blood specimens may not be acceptable for testing.

Requiring patients to fast for 12-14 hours before specimen collection can only control lipemia caused by dietary-induced high lipid levels. For morning specimen collection, the laboratory recommends that the patient is required to fast the previous evening from 6 PM until the next day after specimens are obtained.

<u>Vacuum Tubes or capillary blood collectors (for example Microtainers) containing No Anticoagulants/Preservatives: specific for the collection of **serum**</u>

1. Serum tube without gel (Red-stopper) – contains no anticoagulant or preservative. Whole blood will clot within 30 minutes after collection. Serum may then be separated by centrifugation for 15 minutes at the speed recommended by the manufacturer and transferred to a labeled plastic transport tube.
2. Serum tube with gel (Red/gray, red, speckled, yellow stopper) Also referred to as Serum Separator Tube or SST – contains clot activator and gel for separating serum from cells, but not an anticoagulant. Invert gently five times to mix the clot activator and blood. Whole blood will clot within 30 minutes after collection. Serum may then be separated by centrifugation for 15 minutes at the speed recommended by the manufacturer. Inspect the barrier gel to ensure that it has sealed the serum from the packed cells. It is not necessary to transfer the serum at this point unless a frozen

serum specimen is required. If a frozen serum specimen is required – transfer serum to labeled plastic transport tube. DO NOT FREEZE SERUM SEPARATOR TUBES.

Vacuum Tubes or capillary blood collectors containing Anticoagulants/Preservatives: specific for the collection of **plasma**

1. K_3EDTA tubes (Lavender-stopper) Use for whole blood or plasma. To remove plasma, centrifuge the specimen for 15 minutes at the speed recommended by the manufacturer and aspirate plasma a quarter of an inch above the cell layer. Transfer plasma to a labeled plastic transport tube.
2. Sodium or lithium heparin tubes (Green-stopper). Use for whole blood or plasma.
3. Coagulation tube (Blue-stopper). Use for whole blood or plasma.
4. Oxalate/fluoride tubes (gray-stopper) Use for whole blood or plasma
5. Special specimen collection tube sets (QuantiFERON TB Gold)

CULTURE SPECIMEN COLLECTION

1. General Specimen Collection guidelines:
    a. Collect specimens using sterile technique.
    b. Select the correct anatomic site from which to obtain the specimen and collect the specimen by the proper technique and with the proper supplies
    c. Collect adequate volumes
    d. Place the specimen in a container designed to promote the survival of suspected organisms and to eliminate leakage and potential safety hazards
    e. Label each specimen container with the patient's full name or identification number, source and date of collection
2. Stool Collection guidelines (see Appendix D).
3. Nasopharyngeal Swab Collection guidelines (see Appendix E)
4. Nasal Swab Collection guidelines (see Appendix F)

OUTBREAK INVESTIGATION OR EMERGING DISEASE SPECIMEN COLLECTION

Specimens to be collected for possible outbreak investigation require special handling. Outbreak investigation testing is performed only as requested by the Southern Nevada Health District Office of Epidemiology and Disease Surveillance. Contact SNPHL for appropriate collection kits and forms.

REPORTABLE DISEASE ISOLATE COLLECTION

Reportable disease isolates should be submitted on appropriate tube medium or agar plate. See Appendix I for additional information.

EPIDEMIOLOGY SURVEILLANCE SPECIMEN COLLECTION

Specimens to be collected for epidemiology surveillance require special handling. Surveillance testing is performed only as requested by the Southern Nevada Health District Office of Epidemiology and Disease Surveillance. Contact laboratory for appropriate collection kits and forms.

SPECIMEN PREPARATION FOR TRANSPORT

Refer to the Test Directory for information regarding shipping specifications for each test requested. To preserve specimen integrity, shipping conditions must be adhered to. Proper transport systems and prompt delivery of specimens to the laboratory are critical for obtaining useful laboratory test results. The following information will serve as a guideline when preparing clinical specimens for transport

Specimens may either be picked up by a laboratory courier or delivered to the laboratory by the client.

1. When specimens are to be picked up by a laboratory courier, the client will keep specimens at the appropriate temperature (Ambient specimen at room temperature, refrigerated specimen should remain in a refrigerator until courier arrives and Frozen samples are to be kept in a freezer) prior to transport.

2. Specimens that are designated as Infectious Substances Category A (positive Mycobacterium culture or positive Shiga toxin producing Escherichia coli (STEC) broth) must be packaged to meet appropriate federal guidelines. Clients sending Category A samples by SNPHL courier must contact the SNPHL laboratory manager to arrange for appropriate packaging materials.
3. Culture specimens that are designated as suspect Select Agents (see Appendix I for list of agents) must be packaged as Category A Infectious samples. Clients sending suspect Select Agents to SNPHL by courier must contact the SNPHL laboratory manager to arrange for appropriate packaging materials and Chain of Custody forms.
4. When specimens are to be delivered to the laboratory by the client, please adhere to the following:

    - Specimens which require refrigeration must be transported appropriately in a cooler with ice packs.
    - Specimens which require freezing must be transported appropriately in a cooler with dry ice.
    - Specimens which require ambient (room temperature) transport should be placed in a cooler so that the temperature does not change during transport.

A. Client Transportation Responsibilities

Prior to transport, the client must ensure that the following steps have been performed:

1. Verify that all specimen samples have been appropriately labeled with the patient's full name and identification number, collection date, and source (if sample is for culture).
2. Complete the laboratory requisition with as much information as possible. Carefully check that all tests being requested have been selected by marking the corresponding box. Only one requisition should be submitted for each patient, marking <u>all</u> tests requested. If sending suspect Select Agents for confirmation, complete Chain of Custody form.
3. Wrap parafilm or seal the edges of culture plates or tube media to prevent leakage
4. Place specimens in a biohazard bag with absorbent and carefully seal the closable zip bag.

5. Place the requisition in the **outside** pocket of the biohazard bag. If multiple specimens have been collected for one patient and the shipping requirements are the same, place all specimens in one biohazard bag with absorbent and the requisition in the outside pocket.
6. If multiple specimens have been collected for one patient that have multiple shipping requirements, i.e. frozen and refrigerated, contact the laboratory for instructions.
7. Store all specimens in an appropriate container, either room temperature, refrigerated or frozen.
8. If a sample log is used at the site, ensure that all samples for pickup are on the sample log.

B. Courier Transportation Responsibilities

1. Courier will check each specimen form to ensure all required information is present
2. If the sample log is used at the site, the courier will sign off as appropriate
3. Courier will not touch any specimen bag or container that appears soiled. Facility staff will be asked to place the specimen in another bag so it can be safely transported.
4. Courier staff will not accept any unsealed bags or leaking containers for transport. Facility staff will be asked to seal bags or containers.
5. If Chain of Custody form is required, the courier will ensure that it is completed correctly and make a copy of the form for the facility.
6. Missed or delayed pickups – every attempt will be made to pick up the sample as scheduled. If pickup must be rescheduled, the facility will be notified to ensure that arrangements can be made to store the sample, so that specimen integrity is maintained.

SAFETY

To protect the safety of the healthcare worker collecting the sample, the transport couriers and laboratory personnel, the following precautions must be followed when collecting specimens:

1. During specimen collection wear appropriate Personal Protective Equipment (PPE) which may include gloves, laboratory coat or mask and goggles.
2. Use leak-proof containers and plastic zip style transport bags that have a separate outside compartment for the test requisition form. The transport bags MUST have absorbent material inside the bag.
3. Make sure screw-cap lids are fastened evenly and securely. Ensure that no label material is caught in the threads of the lid.
4. Do not transport leaking containers to the laboratory because test results will be compromised, and it is a hazard to couriers and laboratory personnel.
5. To protect the safety of others, ensure that the outside of the specimen container or the laboratory requisition form is not contaminated by the sample.

LEAKS AND SPILLS

To be safe, couriers will treat every spill as if it were infectious. If a specimen container at a pickup site appears to be leaking, couriers will not touch the specimen bag. Courier will bring it to the attention of site personnel for repackaging.

If a leak or spill occurs in the laboratory or facility, the courier will immediately bring to the attention of laboratory or facility staff for cleanup.

If a leak or spill occurs away from the laboratory or facility, the courier will follow SNPHL biohazardous spill cleanup procedure. A spill response form MUST be completed for all spills and returned to laboratory manager or safety officer. All courier vehicles include the Universal Precaution Compliance Kit (instructions located on the bag) which is to be used for biohazardous spill cleanup.

Using the Universal Precaution Compliance Kit

- Make sure no one touches or walks through the spill.
- Always wear gloves when cleaning up a spill.
- Do not pick up broken glass or sharps with hands – use scoop or tongs.
- Use Red Z in spill cleanup kit to contain the sample. Allow spill to solidify to a dry gel before handling. Note: Red Z will quickly solidify blood and body fluids. It will assist in the safer handling, transportation, and disposal of aqueous fluids.
- Remove gelled material with the scraper and carefully place in Red Bag.
- Clean up remaining solids and disinfect the affected area with a liquid disinfectant or germicidal cloth in the kit. Read disinfectant instructions before use.
- Place all contaminated materials, including gloves in the red bag.
- Seal bag, label and return to SNPHL for disposal in a biohazardous waste container. Notify laboratory personnel if broken glass is present. If broken glass is present, dispose of in sharps container.
- Promptly wash hands thoroughly with soap and water or use antimicrobial towelette.

Alternate clean up method

If for some reason it is not practical to use the Universal Precautions Clean up kit, follow this procedure:

1. Put on gloves
2. Mix 10 parts of water with 1-part bleach or use Dispatch bleach product.
3. Pour the diluted bleach or Dispatch on the spill and let sit for 15 minutes.
4. Do not pick up broken glass or sharps with hands – use scoop or tongs.
5. Blot up the spill with paper towels and wipe the surface dry.
6. Place gloves and towels in biohazard bag if available
7. Wash hands thoroughly with soap and water or use alcohol gel
8. Transport all waste to SNPHL for disposal in a biohazardous waste container. Notify laboratory personnel if broken glass is present. If broken glass is present, dispose of in sharps container.

SAMPLE REJECTION CRITERIA

The goal of the laboratory is to provide quality analysis of clinical specimens, which will assist physicians in managing patient healthcare by making correct diagnostic and therapeutic decisions based on the outcome of laboratory tests as well as provide accurate results for epidemiological surveillance and outbreak investigation. Therefore, it is essential that the laboratory provides accurate test results. The accuracy of test results is dependent on specimen integrity. It is the responsibility of all personnel involved in patient preparation, specimen collection, specimen handling, and specimen analysis to adhere to recommended protocols established to maintain specimen integrity.

The following is a general list of errors, which apply to all clinical specimens and may result in the rejection of the specimen:

1. Unlabeled specimen
2. Mislabeled specimen
3. QNS – quantity of specimen not sufficient for testing

4. Specimen leaked or broken in transit
5. Inaccurate and incomplete patient instructions prior to collection
6. Incorrectly preserved specimens
7. Utilization of expired transport media
8. Inappropriate specimen transport
9. Delayed specimen transport
10. No specimen received
11. Wrong collection kit utilized

Whenever a sample or specimen is rejected, the sample will be held until the client is notified. The client will be contacted by telephone on the day the sample is rejected. A patient report will be sent to the client indicating testing was not performed and providing a reason. Sample rejection data will be evaluated, and protocols modified or developed to reduce sample problems in the future.

REPORTING

Reports will be generated by the laboratory and automatically faxed to the ordering client when the requested testing is completed by the LIMS. Reportable critical results will be telephoned to the ordering client on the day the testing is completed. Reportable abnormal results will be sent to the appropriate Health Authority**.** Hard copy reports are available for most tests upon request.

QUALITY ASSESSMENT PROGRAM (QAP)

The Southern Nevada Public Health Laboratory participates in a comprehensive quality assessment program monitoring all aspects of the analytical process. Clients are provided with collection instructions and advised by the laboratory if those instructions are not followed. All concerns or incidents presented by clients to SNPHL will be analyzed and addressed by the SNPHL laboratory supervisor and laboratory director.

Testing personnel participates in competency testing utilizing unknown samples, blind sample testing and several proficiency testing programs from a variety of accredited sources.

CONSULTATION AND TRAINING

Laboratory personnel is available to provide consultative services to health agencies, private physicians, and laboratories.

CLIENT SERVICES MANUAL
Southern Nevada Public Health Laboratory

TEST DIRECTORY
APPENDIX A

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MICROBIOLOGY

IMMUNOLOGY

MOLECULAR

CLIENT SERVICES MANUAL
Southern Nevada Public Health Laboratory

LAB TEST – Microbiology Section

Test	*Bordetella pertussis* culture
Method	Culture
CPT Code	87060
Patient prep	Not applicable
Specimen	Nasopharyngeal swab or Nasal wash Other acceptable specimens Sputum or Bronchial aspirate
Collect in	Flexible Dacron or Rayon Nasopharyngeal swab placed in Regan Lowe media or Casamino Acid Solution (available from the laboratory)
Specimen label	Label with patient's full name and ID number and date of subculture
Transport	Transport swabs in Casamino Acid within 2 hours of collection; swabs in Regan Lowe media within 24 hours. Store and ship at room temperature. DO NOT REFRIGERATE
Sample rejection	Cough plates or throat swabs are unacceptable Refrigerated specimens Mislabeled/Unlabeled specimen Swabs not in appropriate transport media
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD Office of Epidemiology
Test Complete	9-11 days
Results	*Bordetella pertussis* isolated or not isolated
Reported	**System generated fax;** Electronic transmission
Contact	Southern Nevada Public Health Laboratory – Microbiology section

Southern Nevada Public Health Laboratory
LAB TEST – Microbiology Section

Test	*Neisseria gonorrhoeae* culture
Method	Culture Identification of *Neisseria gonorrhoeae*
CPT Code	87081 Culture 87077 Identification
Patient prep	Not applicable
Specimen	Swab: Acceptable sources: Anal, Cervical, Eye, Urethral, Vaginal, Throat
Collect in	Swab in transport media or Direct inoculation onto Modified Thayer Martin Media (MTM) plate placed in transport bag that will provide a 5-10% CO2 environment (available from the laboratory)
Specimen label	Label with patient's full name and ID number and date of subculture
Transport	Store and ship at room temperature. DO NOT REFRIGERATE Transport to the lab as soon as possible. Swab in transport media must be transported to the lab within 1 hour of collection. Direct inoculation plates must be transported to the lab within 24 hours or incubated at 35-37°C until transported to the lab.
Sample rejection	Inappropriate specimen transport Expired transport medium Leaking transport container Mislabeled/Unlabeled specimen
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD Office of Epidemiology
Test Complete	72 hours
Results	*Neisseria gonorrhoeae* isolated or not isolated
Reported	**System generated fax;** Electronic transmission
Contact	Southern Nevada Public Health Laboratory – Microbiology section

Southern Nevada Public Health Laboratory
LAB TEST – Microbiology Section

Test	Reportable Disease or Unusual Isolate for confirmation, serotyping or identification See Appendix I for a complete list of Reportable Disease isolates to submit to SNPHL
Method	Culture confirmation or serotyping (all organisms are confirmed before being typed)
CPT Code	87077 Culture confirmation, aerobic 87147 Serotyping (*H.influenza*, *N. meningitidis*, *Salmonella, Shigella,* Shiga toxin producing *E. coli*)
Patient prep	Not applicable
Specimen	Pure culture of the organism
Collect in	Appropriate media slant or plate that supports organism growth, e.g., blood, chocolate or tryptic soy agar slant. Utilize specialized media for fastidious organisms, e.g., Regan-Lowe for *Bordetella*; Chocolate agar for *Neisseria*; Campylobacter blood agar for *Campylobacter*.
Specimen label	Label with patient's full name and ID number and date of subculture
Transport	Room temperature in an appropriate growth environment, e.g., CO_2 pack for *Neisseria* or Microaerophilic pouch for *Campylobacter.*
Time Critical	Organism must be received in the laboratory within 48 hours of subculture.
Sample rejection	- Desiccated or improper media - Improper growth environment for the organism - Mislabeled/Unlabeled specimen
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD Office of Epidemiology
Test Complete	Usually within four days of receipt in our laboratory; some organisms may require variable time to complete
Results	Culture confirmation and/or serotype
Reported	**System generated fax;** Electronic transmission
Contact	Southern Nevada Public Health Laboratory – Microbiology section

Southern Nevada Public Health Laboratory
LAB TEST – Microbiology Section

Test	Stool culture for bacterial pathogens including *Salmonella, Shigella, Yersinia, Campylobacter,* Shiga toxin producing *Escherichia coli* (STEC) Culture for *Vibrio* is available on request
Method	Culture for bacterial pathogens Enzyme Immunosorbent Assay (EIA) for STEC
CPT Code	87045 (Culture for *Salmonella* and *Shigella*) 87046 x 3 (Culture for STEC, *Campylobacter, Yersinia*) 87427 (EIA for STEC)
Specimen	Stool (random, fresh) in a clean container. Specimens collected in fecal transport media or rectal swabs are acceptable. Required specimen volume: > 5 ml stool, 5 g or one swab Minimum specimen volume: 5 ml stool, 2 g or one swab
Collect in	Stool sample: clean container or fecal transport media Rectal Swab: fecal transport media
Specimen label	Label container with patient's first and last name, date and time of collection
Special Notes	- Stool specimen should be collected in a clean container, not contaminated with urine, residual soap or disinfectants. - If using fecal transport media, do not fill beyond red line ("Add specimen to this line"). Mix well with transport medium (instruction sheet enclosed with collection kit). Do not use the transport media past the expiration date printed on the label (i.e., EXP: 11/07) - Those portions of stool which contain pus, blood, or mucous should be transferred to a clean specimen container or transport media.
Transport	Store refrigerated and ship at room temperature
Sample rejection	- Specimens > 24 hours old not in transport media Specimens > 48 hours old in transport media - Frozen sample - Multiple specimens collected on the same day - The sample submitted on diaper or tissue paper - Mislabeled/Unlabeled specimen - Specimen quantity not sufficient for testing (QNS)
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD Office of Epidemiology
Test Complete Results	Usually within four days of receipt in the laboratory Enteric pathogen isolated (name) or Altered flora present – predominant growth (name) or No *Shigella, Salmonella, Yersinia, Campylobacter* or STEC isolated – negative, positive,
Reported Contact	**System generated fax;** Electronic transmission Southern Nevada Public Health Laboratory – Microbiology section

Southern Nevada Public Health Laboratory
LAB TEST – Microbiology Section

Test	Stool culture screen for bacterial pathogens including *Salmonella, Shigella, Yersinia, Campylobacter,* Shiga toxin producing *Escherichia coli* (STEC), *Vibrio* List organism sample is to be screened for on test request form
Method	Culture
CPT Code	87046 each screen plate
Specimen	Stool (random, fresh) in a clean container. Specimens collected in fecal transport media or rectal swabs are acceptable. Required specimen volume: > 5 ml stool, 5 g or one swab Minimum specimen volume: 5 ml stool, 2 g or one swab
Collect in	Stool sample: clean container or fecal transport media Rectal Swab: fecal transport media
Specimen label	Label container with patient's first and last name, date and time of collection
Special Notes	- Stool specimen should be collected in a clean container, not contaminated with urine, residual soap or disinfectants. - If using fecal transport media, do not fill beyond red line ("Add specimen to this line"). Mix well with transport medium (instruction sheet enclosed with collection kit). Do not use the transport medium past the expiration date printed on the label (i.e., EXP: 11/06) - Those portions of stool which contain pus, blood, or mucous should be transferred to a clean specimen container or transport media.
Transport	Store refrigerated and ship at room temperature
Sample rejection	- Specimens > 24 hours old not in transport media Specimens > 48 hours old in transport media - Frozen sample - Multiple specimens collected on the same day - The sample submitted on diaper or tissue paper - Mislabeled/Unlabeled specimen - Specimen quantity not sufficient for testing (QNS)
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD Office of Epidemiology
Test Complete	Usually within four days of receipt in the laboratory
Results	Organism screened for (name) isolated or No organism screened for (name) isolated
Reported **Contact**	System generated fax; Electronic Transmission Southern Nevada Public Health Laboratory- Microbiology Section

Southern Nevada Public Health Laboratory
LAB TEST – Immunology Section

Test	C. trachomatis (CT)/N. gonorrhoeae(GC) Aptima 2 Combo
Method	Qualitative Transcription-Mediated Amplification (TMA)
CPT Code	87491 C. trachomatis 87591 N. gonorrohoeae
Specimen	Swab: Vaginal, rectal, throat collected with APTIMA Vaginal Swab Specimen Collection kit (available from SNPHL); OR Swab: Urethral collected with APTIMA Unisex Swab Specimen Collection kit (available from SNPHL); OR First, catch urine (male or female): patient should not have urinated for at least 1 hour prior to specimen collection.
Collect in	Swab: place pink (vaginal) or blue (unisex) swab in APTIMA swab specimen transport tube, break shaft off at the scoreline, then recap tube. Urine: Transfer 2 ml urine to APTIMA Urine Specimen Transport Tube. The liquid level must be between fill lines on the tube.
Processing	Do not open transport tubes. Specimens are placed directly on an instrument or stored in the refrigerator until next business day.
Labeling	Label transport tube with patient's first and last name or coded identification number. Record date and time collected on the tube. SPECIMEN SOURCE IS REQUIRED.
Transport	Swab in transport tube: stable at room temperature for two months; refrigerated for two months; frozen for one year Urine in transport tube: stable at room temperature for one month; refrigerated for one month; frozen for one year.
Sample rejection	-More than 1 or no pink or blue swab in the APTIMA swab transport tube -The final volume of urine is NOT within the black fill lines of the Urine transport tube -Specimen quantity not sufficient for testing (QNS) -Mislabeled/Unlabeled specimen
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD
Test complete	24-48 hours
Reference Range:	CT Negative GC Negative
Results	CT Negative, Positive, or Indeterminate GC Negative, Positive, or Indeterminate
Limitations	Aptima 2 Combo Assay is not approved by the FDA for extragenital and female urine sources. SNPHL has verified the performance characteristics of the test method with these sources.
Reported	System generated fax; Electronic Transmission
Contact	Southern Nevada Public Health Laboratory – Immunology section

Southern Nevada Public Health Laboratory
LAB TEST – Immunology Section

Test	Hepatitis Panel, Acute
Method	chemiluminescent immunoassay
CPT Code	80074
Specimen	Serum
Collect in	Serum separator tube
Processing	Do not open tubes. Centrifuge and then specimens are placed directly on an instrument or stored in the refrigerator until next business day.
Labeling	Label transport tube with patient's first and last name or coded identification number. Record date and time collected on the tube.
Transport	Serum separator tube
Sample rejection	Quantity not sufficient for testing, <300 uL.
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD
Test complete	48-72 hours
Reference Range	Non-reactive
Results	Non-reactive, borderline; reactive
Limitations	Immunocompromised patients may not react positive with this test, and present as a false negative.
Reported **Contact**	System generated fax, Electronic transmission Southern Nevada Public Health Laboratory- Immunology section

Southern Nevada Public Health Laboratory
LAB TEST – Immunology Section

Test	Hepatitis A Antibody, Total
Method	chemiluminescent immunoassay
CPT Code	80074 86317
Specimen	Serum
Collect in	Serum separator tube
Processing	Do not open tubes. Centrifuge and then specimens are placed directly on an instrument or stored in the refrigerator until next business day.
Labeling	Label transport tube with patient's first and last name or coded identification number. Record date and time collected on the tube.
Transport	Serum separator tube
Sample rejection	Quantity not sufficient for testing, <300 uL.
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD
Test complete	48-72 hours
Reference Range	Non-reactive
Results	Non-reactive, borderline; reactive
Limitations	Immunocompromised patients may not react positive with this test, and present as a false negative.
Reported **Contact**	System generated fax; Electronic transmission Southern Nevada Public Health Laboratory- Immunology section

Southern Nevada Public Health Laboratory
LAB TEST – Immunology Section

Test	Hepatitis B Surface Antibody (HBs Ab)
Method	chemiluminescent immunoassay
CPT Code	80074 86317
Specimen	Serum
Collect in	Serum separator tube
Processing	Do not open tubes. Centrifuge and then specimens are placed directly on an instrument or stored in the refrigerator until next business day.
Labeling	Label transport tube with patient's first and last name or coded identification number. Record date and time collected on the tube.
Transport	Serum separator tube
Sample rejection	Quantity not sufficient for testing, <300 uL.
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD
Test complete	48-72 hours
Reference Range	Non-reactive
Results	Non-reactive, borderline; reactive
Limitations	Immunocompromised patients may not react positive with this test, and present as a false negative.
Reported **Contact**	System generated fax; Electronic transmission Southern Nevada Public Health Laboratory- Immunology section

Southern Nevada Public Health Laboratory
LAB TEST – Immunology Section

Test	Hepatitis C Quantitation NAAT
Method	Real-time transcription-mediated amplification (TMA**)**
CPT Code	87522
Specimen	Serum, EDTA Plasma or ACD Plasma
Collect in	Serum Separator Tube, EDTA or ACD Tube.
Processing	Tubes can be sent uncentrifuged but must be centrifuged within 6 hours. Separate serum or plasma from cells and freeze if not tested immediately.
Labeling	Label transport tube with patient's first and last name or coded identification number. Record date and time collected on the tube.
Transport	Transport in original collection tube to the lab within 6 hours**.**
Sample rejection	Samples less than 1200uL will be rejected.
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD
Test complete	48- 72 hours
Reference Range	Not Detected
Results	Not Detected; <10,000 to >10,000,000 copies/mL
Limitations	Through rare, mutations within the highly conserved regions of the viral genome covered by the primers and probes in the HCV Dx Quant assay may result in under quantification of or failure to detect the virus.
Reported **Contact**	System generated fax; Electronic transmission Southern Nevada Public Health Laboratory- Immunology section

Southern Nevada Public Health Laboratory
LAB TEST – Immunology Section

Test	HIV Ag/Ab
Method	MultiPlex Bead Immunoassay **Reflex to HIV-1/HIV-2 Geenius for differentiation if reactive**
CPT Code	87389 HIV Ag/Ab 86701-92 HIV-1 Geenius reflex 86702-92 HIV-2 Geenius reflex
Specimen	Serum Required specimen volume: 2-4 ml serum Minimum specimen volume: 1 ml serum
Collect in	Serum: vacutainer tube with or without gel. Plasma samples not acceptable
Processing	Serum: Allow blood to completely clot (usually within 30 minutes). Serum may then be separated by centrifugation for 15 minutes at the speed recommended by the manufacturer. Vacutainer without gel: Separate serum from cells into an appropriately labeled tube Vacutainer with gel: Does not require removing serum into a separate tube.
Labeling	Label transport tube with patient's first and last name and or coded identification number. Record date and time collected on the tube
Transport	Serum – Store no longer than two days at room temperature or 7 days refrigerated (2-8 degrees C), including the time that samples are in transit.
Sample rejection	-Bacterial contaminated serum -Specimen quantity not sufficient for testing (QNS) -Mislabeled/Unlabeled specimen
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD
Test complete	24-48 hours
Reference Range	Non-reactive
Results	Non-reactive Reactive
Limitations	A non-reactive test result does not preclude the possibility of exposure to or infection with HIV-1 and/or HIV-2.
Reported Contact	System generated fax; Electronic Transmission Southern Nevada Public Health Laboratory – Immunology section

Southern Nevada Public Health Laboratory
LAB TEST – Immunology Section

Test	HIV-1 RNA NAAT
Method	Quantitative transcription mediated amplification
CPT Code	87536
Specimen	Serum**,** EDTA or ACD Plasma
Collect in	One lavender top (EDTA) fully filled tube or Acid Citrate Tube
Processing	Centrifuge sample within 24 hours and store at 2-8 degrees C for three days in the primary tube.
Labeling	Label transport tube with patient's first and last name or coded identification number. Record date and time collected on the tube.
Transport	Transport to the laboratory as soon as possible.
Sample rejection	Quantity insufficient to run test;
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD
Test complete	48 - 72 hours
Reference Range	Not Detected
Results	Not Detected; <30,000 to >10,000,000 copies/mL
Reported **Contact**	System generated fax; Electronic transmission Southern Nevada Public Health Laboratory- Immunology Section

Test	Mycoplasma genitalium (M genitalium)
Method	Qualitative Transcription-Mediated Amplification (TMA)
CPT Code	87563 Infectious agent detection by nucleic acid (DNA or RNA)
Specimen	Swab: Vaginal/endocervical collected with APTIMA Vaginal Swab Specimen Collection kit (available from SNPHL); OR Swab: Male Urethral collected with APTIMA Unisex Swab Specimen Collection kit (available from SNPHL OR First, catch urine (male or female): patient should not have urinated for at least 1 hour prior to specimen collection
Collect in	Swab: place pink (vaginal) or blue (unisex) swab in APTIMA swab specimen transport tube, break shaft off at the scoreline, then recap tube. Urine: Transfer 2 ml urine to APTIMA Urine Specimen Transport Tube. The liquid level must be between fill lines on the tube.
Processing	Do not open transport tubes. Specimens are placed directly on an instrument or stored in the refrigerator until next business day.
Labeling	Label transport tube with patient's first and last name or coded identification number. Record date and time collected on the tube. SPECIMEN SOURCE IS REQUIRED.
Transport	Swab in transport tube: stable at room temperature for two months; refrigerated for two months; frozen for one year Urine in transport tube: stable at room temperature for one month; refrigerated for one month; frozen for one year.
Sample Rejection	-More than 1 or no pink or blue swab in the APTIMA swab transport tube -The final volume of urine is NOT within the black fill lines of the Urine transport tube -Specimen quantity not sufficient for testing (QNS) -Mislabeled/Unlabeled specimen
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD
Test Complete	24-48 hours
Reference Range	Negative, Positive, Invalid
Results	Negative
Limitations	Performance using any female specimen types has not been determined in pregnant women. Performance of the assay has not been evaluated in women less than 19 years of age. Therapeutic failure or success cannot be determined with the Aptima Mycoplasma genitalium assay since nucleic acid may persist following appropriate antimicrobial therapy.
Reported	System generated fax; Electronic Transmission
Contact	Southern Nevada Public Health Laboratory- Immunology Section

Southern Nevada Public Health Laboratory
LAB TEST – Immunology Section

Test	QuantiFERON TB Gold
Method	chemiluminescent immunoassay
CPT Code	86480
Specimen	1 ml of whole blood collected in four **s**pecial QuantiFERON blood collection tubes Catalog # T0590-0505 (100 each gray, green, yellow, purple with ring cap tubes)
Collect in	1 ml of whole blood collected in **s**pecial QuantiFERON blood collection tubes Catalog # T0590-0505 (100 each gray, green, yellow and purple with ring cap tubes) Minimum specimen volume: 1 ml in each tube. Tubes must be at room temperature prior to collection. Alternative: 1 Lithium Heparin 7ml tube
Processing	1. Shake tubes ten times just firmly enough to ensure the entire surface of the tube is coated with blood, to solubilize antigens on the tube wall 2. Transport specimen at room temperature to the laboratory immediately or within 16 hours
Labeling	Label transport tube with patient's first and last name and or coded identification number. Record date and time collected on the tube
Transport	Transport at room temperature within 16 hours.
Sample rejection	-Refrigerated or frozen specimen -Specimen older than 16 hours upon arrival at the lab -Specimen quantity not sufficient for testing (QNS) -Mislabeled/Unlabeled specimen
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD
Test complete	48-72 hours
Reference Range:	Negative, *M. tuberculosis* infection NOT likely
Results	Negative Positive Indeterminate
Limitations	• Predictive value of a positive QFT result in diagnosing *M. tuberculosis* depends on the probability of infection which is accessed through epidemiological, historical, diagnostic and other findings • Diagnosis of latent *M. tuberculosis* requires that tuberculosis disease must be excluded by medical evaluation including assessment of current medical and diagnostic tests for disease as indicated • A negative result must be considered with the individual's medical and historical data relevant to the probability of *M. tuberculosis* infection and risk of progression to *M. tuberculosis* disease, particularly for individuals with impaired immune function. Negative predictive values are likely to be low for persons to have *M. tuberculosis* disease and should not be relied on to exclude disease
Reported	System generated fax; Electronic Transmission
Contact	Southern Nevada Public Health Laboratory – Immunology section

Southern Nevada Public Health Laboratory
LAB TEST – Immunology Section

Test	RPR (Rapid Plasma Reagin), Screening assay
Method	Charcoal flocculation **Reflex to RPR titer and TP-PA for confirmation if reactive**
CPT Code	86592 RPR, 86593 RPR titer reflex 86780 TPPA reflex
Specimen	Serum (preferred) - Required specimen volume: 2-4 ml serum Minimum specimen volume: 1 ml serum Plasma – Tube with anticoagulant (full), minimum:1 ml plasma
Collect in	Serum: vacutainer tube with or without gel. Serum is the *preferred* specimen. Plasma: (EDTA, Sodium Fluoride, Potassium Oxalate, Heparin) samples are acceptable
Processing	Serum: Allow blood to completely clot (usually within 30 minutes). Serum may then be separated by centrifugation for 15 minutes at the speed recommended by the manufacturer. Vacutainer without gel: Separate serum from cells into an appropriately labeled tube Vacutainer with gel: Does not require removing serum into a separate tube. Plasma: Centrifuged plasma specimens must be tested *within* 24 hours
Labeling	Label transport tube with patient's first and last name or coded identification number. Record date and time collected on the tube
Transport	Serum – Store and transport refrigerated (2-8 degrees C) within five days. Plasma – Specimens must be transported to the lab and tested within 24 hours
Sample rejection	-Gross hemolysis or lipemia -Bacterial contaminated serum -Specimen quantity not sufficient for testing (QNS) -Mislabeled/Unlabeled specimen
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD
Test complete	24 – 48 hours
Reference Range:	Non-reactive; Titer <=1:1
Results	Non-reactive Reactive includes titer dilution ratio, e.g., 1:4
Limitations	False-positive reactions occur due to pregnancy, drug addiction, collagen vascular disease, and advanced age. Note any of these conditions on requisition if applicable to the patient.
Reported	System generated fax; Electronic Transmission
Contact	Southern Nevada Public Health Laboratory – Immunology section

Southern Nevada Public Health Laboratory
LAB TEST – Immunology Section

Test	**Syphilis Antibody, Total**
Method	Multiplex Bead Immunoassay **Reflex to RPR, RPR titer and TP-PA for confirmation if reactive or equivocal**
CPT Code	86780 Syphilis IgG & IgM
Specimen	Serum: Required specimen volume: 2-4 ml serum, Minimum specimen volume: 1 ml serum Plasma: Minimum specimen volume: 1 ml plasma
Collect in	Serum: vacutainer tube with or without gel. **Processing** Serum: Allow blood to completely clot (usually within 30 minutes). Serum may then be separated by centrifugation for 15 minutes at the speed recommended by the manufacturer. Vacutainer without gel: Separate serum from cells into an appropriately labeled tube Vacutainer with gel: Does not require removing serum into a separate tube.
Labeling	Label transport tube with patient's first and last name or coded identification number. Record date and time collected on the tube
Transport	Serum – Store and transport refrigerated (2-8 degrees C) within seven days. Plasma – Store and transport refrigerated (2-8 degrees C) to lab and test *within* 48 hours
Sample rejection	-Gross hemolysis or lipemia -Bacterial contaminated serum -Specimen quantity not sufficient for testing (QNS) -Mislabeled/Unlabeled specimen
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD
Test complete	24-48 hours
Reference Range:	Non-reactive
Results	Non-reactive Reactive Equivocal
Limitations	Detection of treponemal antibodies may indicate recent, past, or successfully treated syphilis infections. Therefore, the test cannot be used to differentiate between active and cured cases. False positive results may occur with yaws or pinta. AIDS patients with impaired immunity and who are coinfected with syphilis may react falsely nonreactive in treponemal and nontreponemal tests. A non-reactive Syphilis IgG does not preclude the possibility of recent (<3 weeks) or old (>10 years) infection with *T. pallidum*.
Reported	System generated fax; Electronic Transmission
Contact	Southern Nevada Public Health Laboratory – Immunology section

Southern Nevada Public Health Laboratory
LAB TEST – Immunology Section

Test	*Treponema pallidum* particle agglutination (TPPA) syphilis confirmation
Method	Particle agglutination
CPT Code	86780 TPPA
Specimen	Serum Required specimen volume: 2-4 ml serum Minimum specimen volume: 1 ml serum
Collect in	Serum: (*preferred* specimen) vacutainer tube with or without gel. Plasma: vacutainer with anticoagulant (full), minimum:1 ml plasma
Processing	Serum: Allow blood to completely clot (usually within 30 minutes). Serum may then be separated by centrifugation for 15 minutes at the speed recommended by the manufacturer. Vacutainer without gel: Separate serum from cells into an appropriately labeled tube Vacutainer with gel: Does not require removing serum into a separate tube. Plasma: Centrifuged plasma specimens must be tested *within* 48 hours
Labeling	Label transport tube with patient's first and last name or coded identification number. Record date and time collected on the tube
Transport	Serum – Store and transport refrigerated (2-8 degrees C) within five days Plasma – Store and transport refrigerated (2-8 degrees C) to lab and test *within* 48 hours
Sample rejection	-Gross hemolysis or lipemia -Bacterial contaminated serum -Specimen quantity not sufficient for testing (QNS) -Mislabeled/Unlabeled specimen
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD
Test complete	Test performed weekly on Tuesday and Thursday or as indicated by test volume
Reference Range:	Non-reactive
Results	Non-reactive Reactive Inconclusive Unable to report
Limitations -	TPPA tends to remain reactive following treponemal infection; therefore, it should not be used to evaluate response to therapy. False positive or Inconclusive results may occur due to yaws, pinta, HIV, leprosy, toxoplasmosis, H. pylori, and drug addiction. Unable to report results to occur because the sample did not meet the test Quality Control parameters due to possible interfering substances. Specimens with Inconclusive or Unable to report TPPA results should be re-drawn in two weeks for testing and confirmed by other treponemal methods, such as Syphilis IgG or FTA/ABS.
Reported	System generated fax; Electronic Transmission
Contact	Southern Nevada Public Health Laboratory – Immunology section

Southern Nevada Public Health Laboratory
LAB TEST – Immunology Section

<table>
<tr><td>Test</td><td>SARS CoV-2 PCR NAAT</td></tr>
<tr><td>Method</td><td>Real-time transcription-mediated amplification (TMA)</td></tr>
<tr><td>CPT Code</td><td>87635 Infectious agent detection by nucleic acid</td></tr>
<tr><td>Specimen</td><td>Nasal/Nasopharyngeal Swab</td></tr>
<tr><td>Collect in</td><td>Viral Transport Media, Hologic Lysis Tubes</td></tr>
<tr><td>Processing</td><td>Nasal/Nasopharyngeal swabs collected and placed in VTMs to be aliquoted to Hologic Lysis Tubes within 96 hours or collected and directly placed in Hologic Lysis Tubes</td></tr>
<tr><td>Labeling</td><td>Label transport tube with patient’s first and last name, date of birth.
Record date and time collected on the tube.</td></tr>
<tr><td>Transport</td><td>Transport in original collection tube to the lab within 72 hours.</td></tr>
<tr><td>Sample rejection</td><td>Samples less than 1ml will be rejected.</td></tr>
<tr><td>Requisition</td><td>SNPHL Request Forms
Testing is performed only at the request of SNHD</td></tr>
<tr><td>Test complete</td><td>48- 72 hours</td></tr>
<tr><td>Reference Range</td><td>Not Detected</td></tr>
<tr><td>Results</td><td>
<table>
<tr><th>SARS-CoV-2 Result</th><th>IC Result</th><th>Interpretation</th></tr>
<tr><td>Neg</td><td>Valid</td><td>SARS-CoV-2 not detected.</td></tr>
<tr><td>POS</td><td>Valid</td><td>SARS-CoV-2 detected.</td></tr>
<tr><td>Invalid</td><td>Invalid</td><td>Invalid. There was an error in the generation of the result; retest sample.</td></tr>
</table>
</td></tr>
<tr><td>Limitations</td><td>A positive result indicates the detection of nucleic acid from the relevant virus.
Nucleic acid may persist even after the virus is no longer viable.</td></tr>
<tr><td>Reported Contact</td><td>System generated fax; Electronic transmission
Southern Nevada Public Health Laboratory- Immunology section</td></tr>
</table>

Southern Nevada Public Health Laboratory
LAB TEST – Immunology Section

<table>
<tr><td>Test</td><td>SARS CoV-2 S1/S2 IgG Antibody</td></tr>
<tr><td>Method</td><td>chemiluminescent immunoassay</td></tr>
<tr><td>CPT Code</td><td>86328 Immunoassay for infectious agent antibody
86769 Antibody; Severe Acute Respiratory Syndrome coronavirus 2</td></tr>
<tr><td>Specimen</td><td>serum, plasma</td></tr>
<tr><td>Collect in

Processing</td><td>Serum separator tubes, potassium EDTA, sodium and lithium heparin tubes

Allow serum specimens to completely clot before contamination
Centrifuge at >100,000 RCF for 10 min. If test cannot be performed within 4 days, freeze at -20C or colder</td></tr>
<tr><td>Labeling</td><td>Label transport tube with patient’s first and last name, date of birth. Record date and time collected on the tube.</td></tr>
<tr><td>Transport</td><td>Transport in original collection tube to the lab as soon as possible</td></tr>
<tr><td>Sample rejection</td><td>Samples less than 200 uL of specimen will be rejected.</td></tr>
<tr><td>Requisition</td><td>SNPHL Request Forms
Testing is performed only at the request of SNHD</td></tr>
<tr><td>Test complete</td><td>48- 72 hours</td></tr>
<tr><td>Reference Range</td><td>Positive</td></tr>
<tr><td>Results
Limitations</td><td>
<table>
<tr><th colspan="3">LIAISON® SARS-CoV-2 S1/S2 IgG assay</th></tr>
<tr><td>AU/mL</td><td>Results</td><td>Interpretation of the Results</td></tr>
<tr><td>< 15.0</td><td>Negative</td><td>A negative result may indicate absence or level of IgG antibodies to SARS-CoV2 below the limit of detection of this test. A negative result can also be seen in samples taken during an acute infection prior to IgG seroconversion.</td></tr>
<tr><td>≥ 15.0</td><td>Positive</td><td>A positive result indicates the presence of IgG antibodies to SARS-CoV-2 and generally indicates exposure to SARS-CoV-2.</td></tr>
</table>
Specimens from patients receiving therapeutic doses of Biotin (Vitamin H, B7 or B8) may interfere in immunoassays based on biotinylated reagents.
Detection of IgG antibodies against SARS-CoV-2 at present is not yet established to determine long term immunity to the virus or to protect the patient against re-infection by the virus.</td></tr>
<tr><td>Reported
Contact</td><td>System generated fax; Electronic transmission
Southern Nevada Public Health Laboratory- Immunology section</td></tr>
</table>

Southern Nevada Public Health Laboratory
LAB TEST – Immunology Section

Test	Trichomonas vaginalis NAAT
Method	Qualitative Transcription-Mediated Amplification (TMA)
CPT Code	87661 Infectious agent detection by nucleic acid (DNA or RNA)
Specimen	Swab: Vaginal/endocervical collected with APTIMA Vaginal Swab Specimen Collection kit (available from SNPHL); OR First catch urine (female): patient should not have urinated for at least 1 hour prior to specimen collection
Collect in	Swab: place pink (vaginal) or blue (unisex) swab in APTIMA swab specimen transport tube, break shaft off at the scoreline, then recap tube. Urine: Transfer 2 ml urine to APTIMA Urine Specimen Transport Tube. The liquid level must be between fill lines on the tube.
Processing	Do not open transport tubes. Specimens are placed directly on an instrument or stored in the refrigerator until next business day.
Labeling	Label transport tube with patient's first and last name or coded identification number. Record date and time collected on the tube. SPECIMEN SOURCE IS REQUIRED.
Transport	Swab in transport tube: stable at room temperature for two months; refrigerated for two months; frozen for one year Urine in transport tube: stable at room temperature for one month; refrigerated for one month; frozen for one year.
Sample Rejection	-More than 1 or no pink or blue swab in the APTIMA swab transport tube -The final volume of urine is NOT within the black fill lines of the Urine transport tube -Specimen quantity not sufficient for testing (QNS) -Mislabeled/Unlabeled specimen
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD
Test Complete	24-48 hours
Reference Range	Negative
Results	Negative, Positive, Invalid
Limitations	The Aptima Trichomonas vaginalis Assay has not been validated for use with vaginal swab specimens collected by patients. Therapeutic failure or success cannot be determined with the Aptima Trichomonas vaginalis Assay since nucleic acid may persist following appropriate antimicrobial therapy.
Reported	System generated fax; Electronic Transmission
Contact	Southern Nevada Public Health Laboratory- Immunology Section

Southern Nevada Public Health Laboratory
LAB TEST – Molecular Section

Test	*Bacillus anthracis*
Method	Nucleic acid detection by real-time Reverse Transcriptase Polymerase Chain Reaction (qRT-PCR) Centers for Disease Control and Prevention (CDC) FDA approved the method
CPT Code	87801 Molecular amplification, multiple agents 83891 Extraction of highly purified nucleic acid
Specimen	Human respiratory samples, whole blood, serum, plasma, swabs from lesions, CSF, pleural fluid and bacterial culture isolates.
Collect in	Sterile transport container or evacuated sample collection tube
Specimen label	Label tube with patient's first and last name, date and time of collection
Special notes	Indicate specimen source on requisition form
Transport	Store and transport refrigerated (2-8°C) within 72 hours or freeze (-20 ° C)
Sample rejection	- Mislabeled/unlabeled specimen - Specimen quantity not sufficient for testing (QNS)
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD Office of Epidemiology
Test complete	24 hours following receipt in our laboratory
Results	*Bacillus anthracis* DNA detected (positive) or not detected (negative)
Reported	System generated fax; Electronic transmission
Note	If inhibitors are present in DNA extraction, PCR assays may produce a false negative result. A false negative result may occur if a sample is improperly collected, transported or handled. False negative results may occur if inadequate numbers of organisms are present in the sample.
Contact	Southern Nevada Public Health Laboratory – Molecular section

Southern Nevada Public Health Laboratory
LAB TEST – Molecular Section

Test	*Brucella* species
Method	Nucleic acid detection by real-time Reverse Transcriptase Polymerase Chain Reaction (qRT-PCR) Centers for Disease Control and Prevention (CDC) FDA approved the method
CPT Code	87801 Molecular amplification, multiple agents 83891 Extraction of highly purified nucleic acid
Specimen	Whole blood, serum, and bacterial culture isolates.
Collect in	Evacuated sample collection tube, culture plates or tubes
Specimen label	Label tube with patient's first and last name, date and time of collection
Special notes	Indicate specimen source on requisition form
Transport	Store and transport refrigerated (2-8°C) within 72 hours or freeze (-20 ° C)
Sample rejection	- Mislabeled/unlabeled specimen - Specimen quantity not sufficient for testing (QNS)
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD Office of Epidemiology
Test complete	24 hours following receipt in our laboratory
Results	*Brucella* species DNA detected (positive) or not detected (negative)
Reported	System generated fax; Electronic transmission
Note	If inhibitors are present in DNA extraction, PCR assays may produce a false negative result. A false negative result may occur if a sample is improperly collected, transported or handled. False negative results may occur if inadequate numbers of organisms are present in the sample.
Contact	Southern Nevada Public Health Laboratory – Molecular section

Southern Nevada Public Health Laboratory
LAB TEST – Molecular Section

Test	*Burkholderia mallei or pseudomallei*
Method	Nucleic acid detection by real-time Reverse Transcriptase Polymerase Chain Reaction (qRT-PCR) Centers for Disease Control and Prevention (CDC) FDA approved the method
CPT Code	87801 Molecular amplification, multiple agents 83891 Extraction of highly purified nucleic acid
Specimen	Whole blood, serum, and bacterial culture isolates.
Collect in	Evacuated sample collection tube, culture plates or tubes
Specimen label	Label tube with patient's first and last name, date and time of collection
Special notes	Indicate specimen source on requisition form
Transport	Store and transport refrigerated (2-8°C) within 72 hours or freeze (-20 ° C)
Sample rejection	- Mislabeled/unlabeled specimen - Specimen quantity not sufficient for testing (QNS)
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD Office of Epidemiology
Test complete	24 hours following receipt in our laboratory
Results	*Burkholderia mallei or pseudomallei* DNA detected (positive) or not detected (negative)
Reported	System generated fax; Electronic transmission
Note	If inhibitors are present in DNA extraction, PCR assays may produce a false negative result. A false negative result may occur if a sample is improperly collected, transported or handled. False negative results may occur if inadequate numbers of organisms are present in the sample.
Contact	Southern Nevada Public Health Laboratory – Molecular section

Southern Nevada Public Health Laboratory
LAB TEST – Molecular Section

Test	*Coxiella burnetii*
Method	Nucleic acid detection by real-time Reverse Transcriptase Polymerase Chain Reaction (qRT-PCR) Centers for Disease Control and Prevention (CDC) non-FDA approved method
CPT Code	87801 Molecular amplification, multiple agents 83891 Extraction of highly purified nucleic acid
Specimen	Whole blood.
Collect in	Evacuated sample collection tube
Specimen label	Label tube with patient's first and last name, date and time of collection
Special notes	Indicate specimen source on requisition form
Transport	Store and transport refrigerated (2-8°C) within 72 hours
Sample rejection	- Mislabeled/unlabeled specimen - Specimen quantity not sufficient for testing (QNS)
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD Office of Epidemiology
Test complete	24 hours following receipt in our laboratory
Results	*Coxiella burnetii* DNA detected (positive) or not detected (negative)
Reported	System generated fax; Electronic transmission
Note	If inhibitors are present in DNA extraction, PCR assays may produce a false negative result. A false negative result may occur if a sample is improperly collected, transported or handled. False negative results may occur if inadequate numbers of organisms are present in the sample.
Contact	Southern Nevada Public Health Laboratory – Molecular section

Southern Nevada Public Health Laboratory
LAB TEST – Molecular Section

Test	Ebola Zaire
Method	Nucleic acid detection by real-time Reverse Transcriptase Polymerase Chain Reaction (qRT-PCR) Centers for Disease Control and Prevention (CDC) EUA FDA approved the method
CPT Code	87801 Molecular amplification, multiple agents 83891 Extraction of highly purified nucleic acid
Specimen	Whole blood **(**EDTA)
Collect in	Evacuated sample collection tube (Purple top – EDTA)
Specimen label	Label transport tube with patient's first and last name, date and time of collection
Special notes	Indicate specimen source on requisition form
Transport	Store and transport refrigerated (2-8°C) within 24 hours or freeze (-20 ° C)
Sample rejection	- Mislabeled/unlabeled specimen - Specimen quantity not sufficient for testing (QNS)
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD Office of Epidemiology
Test complete	24 hours following receipt in our laboratory
Results	Ebola Zaire RNA detected or not detected.
Reported	System generated fax; Electronic transmission
Note	A not detected result does not preclude the possibility of Ebola infection in the patient.
Contact	Southern Nevada Public Health Laboratory – Molecular section

Southern Nevada Public Health Laboratory
LAB TEST – Molecular Section

Test	*Francisella tularensis*
Method	Nucleic acid detection by real-time Reverse Transcriptase Polymerase Chain Reaction (qRT-PCR) Centers for Disease Control and Prevention (CDC) FDA approved the method
CPT Code	87801 Molecular amplification, multiple agents 83891 Extraction of highly purified nucleic acid
Specimen	Whole blood and bacterial culture isolates.
Collect in	Evacuated sample collection tube, culture plates or tubes
Specimen label	Label tube with patient's first and last name, date and time of collection
Special notes	Indicate specimen source on requisition form
Transport	Store and transport refrigerated (2-8°C) within 72 hours or freeze (-20 ° C)
Sample rejection	- Mislabeled/unlabeled specimen - Specimen quantity not sufficient for testing (QNS)
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD Office of Epidemiology
Test complete	24 hours following receipt in our laboratory
Results	*Francisella tularensis* DNA detected (positive) or not detected (negative)
Reported	System generated fax; Electronic transmission
Note	If inhibitors are present in DNA extraction, PCR assays may produce a false negative result. A false negative result may occur if a sample is improperly collected, transported or handled. False negative results may occur if inadequate numbers of organisms are present in the sample.
Contact	Southern Nevada Public Health Laboratory – Molecular section

Southern Nevada Public Health Laboratory
LAB TEST – Bacteriology/Virology Molecular Section

Test	Gastrointestinal Panel – BioFire
Method	Multiplexed assay of nucleic acid detection by real-time Reverse Transcriptase Polymerase Chain Reaction (qRT-PCR) Non-FDA approved. Method verified by SNPHL
CPT Code	87501 Molecular amplification, multiple agents 83891 Extraction of highly purified nucleic acid
Specimen	Fresh Stool, Stool preserved in Cary-Blair medium
Collect in	Stool collection kit
Specimen label	Label stool transport container with patient's first and last name, date and time of collection
Special notes	Indicate specimen source on requisition form
Transport	Store and transport freshly collected stool refrigerated (2-8°C) within 24 hours or freeze (-20 ° C). Stool may also be placed in Cary-Blair specimen container at refrigerated (2-8°C)
Sample rejection	- Fresh specimens > 24 hours old and not frozen or in Cary-Blair medium - Mislabeled/unlabeled specimen - Specimen quantity not sufficient for testing (QNS)
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD Office of Epidemiology
Test complete	24-48 hours following receipt in our laboratory
Results	*Campylobacter, Clostridium difficile, Plesiomonas shigelloides. Salmonella, Shigella/Enteroinvasive E. coli, Shiga-toxin producing E.coli, Enteroaggregative E.coli, Enteropathogenic E.coli, Enterotoxigenic E.coli, Yersinia enterocolitica, Vibrio, Cryptosporidium, Cyclospora cayetenesis, Entamoeba histolytica, Giardia lamblia, Astrovirus, Norovirus, Sapovirus, Adenovirus F40/F41* nucleic acid detected or not detected
Reported	System generated fax; Electronic transmission
Note	A not detected result does not preclude the possibility of gastrointestinal infection in the patient. A detected result does not preclude the presence of other gastrointestinal pathogens.
Contact	Southern Nevada Public Health Laboratory – Molecular section

Southern Nevada Public Health Laboratory
LAB TEST – Molecular Section

Test	Influenza A (with subtype H1, H3, and 2009 H1N1) and B (with genogroup Yamagata and Victoria)
Method	Nucleic acid detection by real-time Reverse Transcriptase Polymerase Chain Reaction (qRT-PCR) Centers for Disease Control and Prevention (CDC) FDA approved the method
CPT Code	87801 Molecular amplification, multiple agents 83891 Extraction of highly purified nucleic acid
Specimen	Nasopharyngeal swab, Nasal swab, Nasal wash
Collect in	Swab specimen should be collected only on swabs with a Dacron tip and an aluminum or plastic shaft. Swabs with calcium alginate or cotton tips and wooden shafts are unacceptable. Following collection, all specimens are placed in Viral Transport Media (VTM) M4.
Specimen label	Label transport tube with patient's first and last name, date and time of collection
Special notes	Indicate specimen source on requisition form
Transport	Store and transport refrigerated (2-8°C) within 72 hours or freeze (-20 ° C)
Sample rejection	- Specimens > 72 hours old and not frozen - Samples collected with calcium alginate or cotton tips and wooden shafts - Mislabeled/unlabeled specimen - Specimen quantity not sufficient for testing (QNS)
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD Office of Epidemiology
Test complete	48-72 hours following receipt in our laboratory
Results	Influenza A and Influenza B detected or not detected. Influenza A subtypes AH1, AH3, and A 2009 H1N1 will be reported if Influenza A is detected. Influenza B genogroup Yamagata or Victoria will be reported if Influenza B is detected.
Reported	System generated fax; Electronic transmission
Note	A not detected result does not preclude the possibility of influenza infection in the patient. A detected result does not preclude the presence of other respiratory pathogens.
Contact	Southern Nevada Public Health Laboratory – Molecular section

Southern Nevada Public Health Laboratory
LAB TEST – Virology Molecular Section

Test	Influenza SARS-CoV-2 (Flu SC2) Multiplex RT-PCR EUA, CDC
Method	Nucleic acid detection by real-time Reverse Transcriptase Polymerase Chain Reaction (qRT-PCR) **Emergency Use Authorization Only**
CPT Code	**87636** Infectious agent detection by nucleic acid (DNA or RNA); severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (Coronavirus disease [COVID-19]) and influenza virus types A and B, multiplex amplified probe technique.
Specimen	Nasopharyngeal swab or Nasal swab
Collect in	Swab specimen should be collected only on swabs with a synthetic polymer head (e.g. Dacron) and plastic shaft. Swabs with calcium alginate, cotton tips, or wooden shafts are unacceptable. Following collection, all specimens must be placed in Viral Transport Media (VTM) M4 and properly stored. Collection kits containing both acceptable swabs and VTM may be provided by contacting SNPHL at 702-759-1020.
Specimen label	Label transport tube with patient's first and last name, date and time of collection
Special notes	Indicate specimen source on requisition form. Record patient symptomatology on request form.
Transport	Store and transport refrigerated (2-8°C) within 72 hours or freeze (-20 ° C)
Sample rejection	- Specimens > 72 hours old and not frozen - Samples collected with calcium alginate, cotton tips, or wooden shafts - Mislabeled/unlabeled specimen - Specimen quantity not sufficient for testing (QNS)
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD Office of Epidemiology
Test complete	48-72 hours following receipt in our laboratory
Results	Influenza A, Influenza B, and/or COVID-19 Positive or Negative
Reported	System generated fax; Electronic transmission
Note	Negative results do not preclude the possibility of respiratory virus infection in the patient. Consider testing for other respiratory viruses. Positive results do not preclude the presence of other respiratory pathogens.
Contact	Southern Nevada Public Health Laboratory – Molecular section

Southern Nevada Public Health Laboratory
LAB TEST – Molecular Section

Test	Non-variola *orthopoxvirus*
Method	Nucleic acid detection by real-time Reverse Transcriptase Polymerase Chain Reaction (qRT-PCR) Centers for Disease Control and Prevention (CDC) FDA approved the method
CPT Code	87801 Molecular amplification, multiple agents 83891 Extraction of highly purified nucleic acid
Specimen	**Contact laboratory prior to sample collection. Specimens submitted must be in duplicate. One for presumptive and one for confirmation.** **#2** dry swabs of the lesion **(CDC preferred)** Vesicle fluid, skin, crust, "roof." Touch prep (slide) of lesion Fresh biopsy of pustule or vesicle (no formalin)
Collect in	Sterile collection container, slides, swabs in transport container
Specimen label	Label tube or container with patient's first and last name, date and time of collection
Special notes	Indicate specimen source on requisition form
Transport	Store and transport refrigerated (2-8°C) within 1 hours or freeze (-20 ° C)
Sample rejection	- Mislabeled/unlabeled specimen - Specimen quantity not sufficient for testing (QNS)
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD Office of Epidemiology
Test complete	24 hours following receipt in our laboratory
Results	Non-variola *orthopoxvirus* DNA detected (positive) or not detected (negative)
Reported	System generated fax; Electronic transmission
Note	If inhibitors are present in DNA extraction, PCR assays may produce a false negative result. A false negative result may occur if a sample is improperly collected, transported or handled. False negative results may occur if inadequate numbers of organisms are present in the sample.
Contact	Southern Nevada Public Health Laboratory – Molecular section

Southern Nevada Public Health Laboratory
LAB TEST – Molecular Section

Test	Norovirus, Genome Group 1 (G1) and Genome Group 2 (G2)
Method	Nucleic acid detection by Real-time Polymerase Chain Reaction (qtPCR) Non-FDA approved. Method verified by SNPHL
CPT Code	87801 Molecular amplification, multiple agents 83891 Extraction of highly purified nucleic acid
Specimen	Stool (random, fresh) - No preservatives or fixatives Required specimen volume: > 5 ml stool, 5 g Minimum specimen volume: 1 ml stool, 1 g
Collect in	Clean, dry container that does not contain oxidizing agents or detergents
Specimen label	Label container with patient's first and last name, date and time of collection
Special notes	- Indicate specimen source on requisition form - Stool specimen must be collected in a clean container, not contaminated with urine, residual soap or disinfectant
Transport	Store and transport refrigerated (2-8°C) within 48 hours or freeze (-20 ° C)
Sample rejection	- Specimens > 48 hours old and not frozen - Samples collected in preservatives or fixatives - Mislabeled/unlabeled specimen - Specimen quantity not sufficient for testing (QNS)
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD Office of Epidemiology
Test complete	24-48 hours following receipt in our laboratory
Results	Norovirus nucleic acid Genome Group 1 and 2 detected or not detected
Reported	System generated fax; Electronic transmission
Note	A not detected result does not preclude the possibility of norovirus infection in the patient. A detected result does not preclude the presence of other enteric pathogens.
Contact	Southern Nevada Public Health Laboratory – Molecular section

Southern Nevada Public Health Laboratory
LAB TEST – Molecular Section

Test	Novel Coronavirus 2012
Method	Nucleic acid detection by real-time Reverse Transcriptase Polymerase Chain Reaction (qRT-PCR) Centers for Disease Control and Prevention (CDC) EUA FDA approved the method
CPT Code	87801 Molecular amplification, multiple agents 83891 Extraction of highly purified nucleic acid
Specimen	Nasopharyngeal swab
Collect in	Swab specimen should be collected only on swabs with a Dacron tip and an aluminum or plastic shaft. Swabs with calcium alginate or cotton tips and wooden shafts are unacceptable. Following collection, all specimens are placed in Viral Transport Media (VTM) M4.
Specimen label	Label transport tube with patient's first and last name, date and time of collection
Special notes	Indicate specimen source on requisition form
Transport	Store and transport refrigerated (2-8°C) within 24 hours or freeze (-20 ° C)
Sample rejection	- Mislabeled/unlabeled specimen - Specimen quantity not sufficient for testing (QNS)
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD Office of Epidemiology
Test complete	24 hours following receipt in our laboratory
Results	Novel Coronavirus 2012 RNA detected or not detected.
Reported	System generated fax; Electronic transmission
Note	A not detected result does not preclude the possibility of Novel Coronavirus 2012 infection in the patient. A detected result does not preclude the presence of other respiratory pathogens
Contact	Southern Nevada Public Health Laboratory – Molecular section

Southern Nevada Public Health Laboratory
LAB TEST – Molecular Section

Test	Novel Coronavirus 2019
Method	Nucleic acid detection by real-time Reverse Transcriptase Polymerase Chain Reaction (qRT-PCR) Centers for Disease Control and Prevention (CDC) EUA FDA approved the method
CPT Code	87801 Molecular amplification, multiple agents 83891 Extraction of highly purified nucleic acid
Specimen	Nasopharyngeal swab
Collect in	Swab specimen should be collected only on swabs with a Dacron tip and an aluminum or plastic shaft. Swabs with calcium alginate or cotton tips and wooden shafts are unacceptable. Following collection, all specimens are placed in Viral Transport Media (VTM) M4.
Specimen label	Label transport tube with patient's first and last name, Date of Birth, date and time of collection
Special notes	Indicate specimen source on requisition form
Transport	Store and transport refrigerated (2-8°C) within 24 hours or freeze (-20 ° C)
Sample rejection	- Mislabeled/unlabeled specimen - Specimens >72 hours old - Swabs with calcium alginate or cotton tips and wooden shafts - Specimen quantity not sufficient for testing (QNS)
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD Office of Epidemiology
Test complete	48-72 hours following receipt in our laboratory
Results	System generated fax; Electronic transmission
Reported	Mail or fax, as established by the client
Note	A not detected result does not preclude the possibility of Novel Coronavirus 2019 infection in the patient. A detected result does not preclude the presence of other respiratory pathogens
Contact	Southern Nevada Public Health Laboratory – Molecular section

Southern Nevada Public Health Laboratory
LAB TEST – Molecular Section

Test	*Orthopoxvirus*
Method	Nucleic acid detection by real-time Reverse Transcriptase Polymerase Chain Reaction (qRT-PCR) Centers for Disease Control and Prevention (CDC) FDA approved the method
CPT Code	87801 Molecular amplification, multiple agents 83891 Extraction of highly purified nucleic acid
Specimen	**Contact laboratory prior to sample collection** Vesicle fluid, skin, crust, "roof." A dry or wet swab of the lesion (dry swab is preferred) Touch prep (slide) of lesion Fresh biopsy of pustule or vesicle (no formalin)
Collect in	Sterile collection container, slides, swabs in the transport container
Specimen label	Label tube or container with patient's first and last name, date and time of collection
Special notes	Indicate specimen source on requisition form
Transport	Store and transport refrigerated (2-8°C) within 24 hours or freeze (-20 ° C)
Sample rejection	- Mislabeled/unlabeled specimen - Specimen quantity not sufficient for testing (QNS)
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD Office of Epidemiology
Test complete	24 hours following receipt in our laboratory
Results	O*rthopoxvirus* DNA detected (positive) or not detected (negative)
Reported	System generated fax; Electronic transmission
Note	If inhibitors are present in DNA extraction, PCR assays may produce a false negative result. A false negative result may occur if a sample is improperly collected, transported or handled. False negative results may occur if inadequate numbers of organisms are present in the sample.
Contact	Southern Nevada Public Health Laboratory – Molecular section

Southern Nevada Public Health Laboratory
LAB TEST – Molecular Section

Test	Respiratory Pathogen Panel BioFire– Diagnostic and Surveillance
Method	Nucleic acid detection by Multiplex PCR FDA approved the method
CPT Code	87631 Molecular amplification, multiple agents
Specimen	Nasopharyngeal swab for Diagnostic Nasal swab for Surveillance (only ordered by SNHD Office of Epidemiology and Disease Investigation)
Collect in	Swab specimen should be collected only on swabs with a Dacron tip and an aluminum or plastic shaft. Swabs with calcium alginate or cotton tips and wooden shafts are unacceptable. Following collection, all specimens are placed in Viral Transport Media (VTM) M4.
Specimen label	Label transport tube with patient's first and last name, date and time of collection
Special notes	Indicate specimen source on requisition form
Transport	Store and transport refrigerated (2-8°C) within 72 hours or freeze (-20 ° C)
Sample rejection	- Specimens > 72 hours old and not frozen - Samples collected with calcium alginate or cotton tips and wooden shafts - Mislabeled/unlabeled specimen - Specimen quantity not sufficient for testing (QNS)
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD Office of Epidemiology
Test complete	48-72 hours following receipt in our laboratory
Results	Adenovirus, Coronavirus 229E, Coronavirus HKU1, Coronavirus NL63, Coronavirus OC43, Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), Human Metapneumovirus, Human Rhinovirus/Enterovirus, Influenza A, including subtypes H1, H3, and H1-2009, Influenza B, Parainfluenza Virus 1, 2, 3, 4, Respiratory Syncytial Virus, *Bordetella parapertussis, Bordetella pertussis, Chlamydophila pneumoniae, Mycoplasma pneumoniae* nucleic acid detected or not detected
Reported	System generated fax; Electronic transmission
Note	A not detected result does not preclude the possibility of respiratory pathogen infection in the patient. A detected result does not preclude the presence of other respiratory pathogens.

Contact	Southern Nevada Public Health Laboratory – Molecular section

Southern Nevada Public Health Laboratory
LAB TEST – Molecular Section

Test	Varicella-zoster virus (VZV)
Method	Nucleic acid detection by real-time Reverse Transcriptase Polymerase Chain Reaction (qRT-PCR) Centers for Disease Control and Prevention (CDC) FDA approved the method
CPT Code	87801 Molecular amplification, multiple agents 83891 Extraction of highly purified nucleic acid
Specimen	**Contact laboratory before sample collection** Vesicle fluid, skin, crust, "roof." A dry or wet swab of the lesion (dry swab is preferred) Touch prep (slide) of lesion Fresh biopsy of pustule or vesicle (no formalin)
Collect in	Sterile collection container, slides, swabs in the transport container
Specimen label	Label tube or container with patient's first and last name, date and time of collection
Special notes	Indicate specimen source on requisition form
Transport	Store and transport refrigerated (2-8°C) within 24 hours or freeze (-20 ° C)
Sample rejection	- Mislabeled/unlabeled specimen - Specimen quantity not sufficient for testing (QNS)
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD Office of Epidemiology
Test complete	24 hours following receipt in our laboratory
Results	VZV DNA detected (positive) or not detected (negative)
Reported	System generated fax; Electronic transmission
Note	If inhibitors are present in DNA extraction, PCR assays may produce a false negative result. A false negative result may occur if a sample is improperly collected, transported or handled. False negative results may occur if inadequate numbers of organisms are present in the sample.
Contact	Southern Nevada Public Health Laboratory – Molecular section

Southern Nevada Public Health Laboratory
LAB TEST – Molecular Section

Test	*Yersinia pestis*
Method	Nucleic acid detection by real-time Reverse Transcriptase Polymerase Chain Reaction (qRT-PCR) Centers for Disease Control and Prevention (CDC) FDA approved the method
CPT Code	87801 Molecular amplification, multiple agents 83891 Extraction of highly purified nucleic acid
Specimen	Bronchial wash, transtracheal aspirate, sputum, nasopharyngeal swabs, culture isolates
Collect in	Sterile container, Evacuated sample collection tube, culture plates or tubes
Specimen label	Label tube with patient's first and last name, date and time of collection
Special notes	Indicate specimen source on requisition form
Transport	Store and transport refrigerated (2-8°C) within 72 hours or freeze (-20 ° C)
Sample rejection	- Mislabeled/unlabeled specimen - Specimen quantity not sufficient for testing (QNS)
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD Office of Epidemiology
Test complete	24 hours following receipt in our laboratory
Results	*Yersinia pestis* DNA detected (positive) or not detected (negative)
Reported	System generated fax; Electronic transmission
Note	If inhibitors are present in DNA extraction, PCR assays may produce a false negative result. A false negative result may occur if a sample is improperly collected, transported or handled. False negative results may occur if inadequate numbers of organisms are present in the sample.
Contact	Southern Nevada Public Health Laboratory – Molecular section

Southern Nevada Public Health Laboratory
LAB TEST – Molecular Section

Test	Trioplex for *Zika, Chikungunya,* and *Dengue* (Emergency Use Authorization Only)
Method	Nucleic acid detection by real-time Reverse Transcriptase Polymerase Chain Reaction (qRT-PCR) Centers for Disease Control and Prevention (CDC) FDA approved the method
CPT Code	87801 Molecular amplification, multiple agents 83891 Extraction of highly purified nucleic acid
Specimen	**Contact laboratory prior to sample collection** Serum: 2-4 ml Urine minimum 5 ml
Collect in	Urine: sterile container Serum: vacutainer tube with or without gel
Specimen label	Label tube or container with patient's first and last name, date and time of collection
Special notes	Indicate specimen source on requisition form
Transport	Store and transport refrigerated (2-8°C) within 24 hours or freeze (-20 ° C)
Sample rejection	- Mislabeled/unlabeled specimen - Specimen quantity not sufficient for testing (QNS)
Requisition	**SNPHL Request Forms** Testing is performed only at the request of SNHD Office of Epidemiology
Test complete	7 -14 days following receipt in our laboratory
Results	Zika DNA detected (positive) or not detected (negative) [serum and urine] Dengue DNA detected (positive) or not detected (negative) [serum only] Chikungunya DNA detected (positive) or not detected (negative) [serum only]
Reported	System generated fax; Electronic transmission
Note	If inhibitors are present in DNA extraction, PCR assays may produce a false negative result. A false negative result may occur if a sample is improperly collected, transported or handled. False negative results may occur if inadequate numbers of organisms are present in the sample.
Contact	Southern Nevada Public Health Laboratory – Molecular section

Southern Nevada Public Health Laboratory

APPENDIX B

CLIENT INFORMATION FORM (Sample Only)
Request Current Copy of Client Information Form from SNPHL

Southern Nevada Public Health Laboratory
700 S Martin Luther King Blvd.
Las Vegas, Nevada 89106
Nevada State License # 3828LIC
CLIA # 29D1027844
Horng-Yuan Kan, PhD HCLD (ABB), Laboratory Director
Telephone 702 759 1020 Fax 702 382 2032

CLIENT INFORMATION FORM

This form will be utilized to collect information needed to establish a client account with Southern Nevada Public Health Laboratory. It may also be used to update information on an established client

PLEASE PRINT CLEARLY AND INCLUDE ALL INFORMATION

Client (Facility) Name_____

Physical address of client (facility)_____

City_____ State _____ Zip_____

Mailing address of client (facility)_____

City _____ State _____ Zip _____

Client (Facility) Telephone_____ Secure Fax_____

Please provide a contact person(s) at your facility who will be responsible for requesting supplies, requesting sample pickups, receiving reports and communicating with SNPHL

Client contact name_____
First name Last name

Responsible for:___Supplies request ___Sample pickup ___Reports ___ Communication

Contact phone _____ Fax_____ email_____

Client contact name_____
First name Last name

Responsible for:___Supplies request ___Sample pickup ___Reports ___ Communication

Contact phone _____ Fax_____ email_____

CLIENT SERVICES MANUAL
Southern Nevada Public Health Laboratory

APPENDIX C

GLOSSARY

Ambient- at room temperature (15-30 degrees C).

Culture- the growing of microorganisms, tissue cells, or other living matter in a specially prepared nutrient medium.

Frozen- samples which require freezing must be transported appropriately in a cooler with dry ice.

HIV Sample Number- sometimes referred to as "bubble number"; a unique sample identifier.

Plasma- the clear yellowish fluid portion of blood, lymph, or intramuscular fluid in which cells are suspended. It differs from serum in that it contains fibrin and other soluble clotting elements.

Refrigerated- samples which require refrigeration must be transported appropriately in a cooler with ice packs.

Serum- the clear yellowish fluid obtained upon separating whole blood into its solid and liquid components after it has been allowed to clot. Also called blood serum.

Specimen type- refers to how the specimen is collected, for example, swab, SST, Thayer-Martin

Specimen source - refers to topography or location in the body from where the specimen was taken.

Vacuum Serum Separator tubes (SST) - used for collection of serum. Plastic tubes contain clot activator and gel for serum separation. For example, gold, red, red/black, red/yellow

Vacuum tubes- used for collection of plasma containing anticoagulants or preservatives. For example, blue, lavender and gray tops.

Whole blood- blood containing two main parts; a liquid part called serum or plasma, and a solid part containing red cells, white cells, and platelets.

Southern Nevada Public Health Laboratory
APPENDIX D
Stool Specimen Collection (revised 11-03-2017)

Stool collection kit includes

Commode collection unit and Cay Blair Transport Medium in a large Ziploc bag.

Collection of stool sample

1. Remove lid from Commode collection unit.
2. Insert open container over the toilet bowl and place under the seat so that the short portion is to the back of the bowl (see diagram below).
3. Close toilet seat to hold the collection container in place. Collect stool sample directly into the commode unit. **DO NOT URINATE IN COMMODE. STOOL SAMPLE ONLY.**
4. Remove container and firmly snap the lid on. Remove the unit frame from the commode collection bowl and discard.

If the sample is collected in a diaper, DO NOT place the diaper in the container. Scrape unabsorbed stool from the diaper into the container. If the stool sample is very liquid, it may be helpful to place saran wrap over the diaper during sample collection. This will prevent the liquid stool from being absorbed into the diaper. If saran wrap is used, then after the sample is collected, remove the saran wrap from the diaper and place the saran wrap ONLY (not the diaper) into the container.

Sample into Cary Blair Transport Medium

5. Open the commode collection container.
6. Using the collection spoon attached to the lid of the Cary Blair Transport Medium, take a small portion of the stool in the commode collection bowl and place into the Cary Blair Transport Medium. Continue to add the specimen until the red liquid reaches the black arrow fill line. DO NOT discard the remaining sample in the commode collection bowl as that will need to be submitted as well with the Cary Blair Transport Medium.
7. Mix contents gently in the Cary Blair Transport Medium with collection spoon.
8. Screw the cap on the container so that it is closed tightly.
9. Firmly snap the lid on the commode collection bowl.
10. WASH HANDS thoroughly.
11. Write name, collection date and time on a pre-printed label on the commode collection bowl container and the Cary Blair Transport Medium.
12. Place both closed containers (commode collection bowl and Cary Blair Transport Medium) into the large Ziploc bag and seal.
13. **Contact Southern Nevada Health District (SNHD) Office of Epidemiology and Disease Surveillance (OEDS) at (702) 759-1300 option #2 to arrange for specimen drop off time and receive directions to the location. Hours for sample delivery are Monday through Friday 8:00 am - 3:30 pm. They are closed on federal holidays.**

Transportation of collected stool sample

Samples will need to be delivered to SNHD OEDS at 280 S. Decatur, Las Vegas, Nevada 89107 within 4 hours of collection. If unable to deliver immediately, then refrigerate both the large commode container stool and Cary Blair Transport Medium sample in the large Ziploc bag. Deliver both samples within 24 hours of collection. The stool samples can be kept in the refrigerator or on ice until transported.

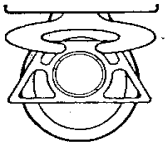
Sample Rejection Criteria

1. Specimen over 24 hours old
2. Mislabeled/Unlabeled specimen

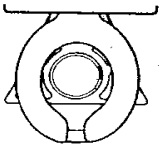
Result Reporting

The patient will be notified of results by SNHD Office of Epidemiology and Disease Surveillance upon receipt of test results from the laboratory.

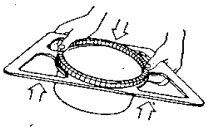
Stool Commode collection procedure



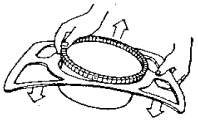
A. Place Collection unit under toilet seat in center of rear bowl



B. Close toilet seat to hold system and collect stool sample- **no urine**



C. Snap lid on container tightly after stool collection Write name and date on lid



D. Remove bracket as shown by placing unit on a counter Push down on one side and then other

CLIENT SERVICES MANUAL
Southern Nevada Public Health Laboratory

APPENDIX E
Nasopharyngeal Swab Collection

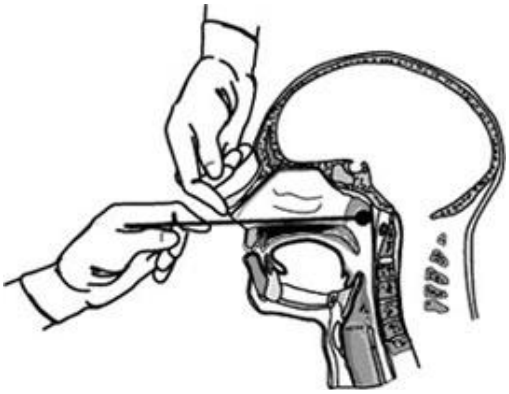
SNPHL Collection of Nasopharyngeal Specimen

Materials

1. Gloves Powder-free and non-latex preferred
2. N-95 mask – ensure collector has been fit tested
3. Eye protection/goggles for a collector to protect from coughs, sneezes or splashes
4. Lab coat or jacket
5. Facial tissues for patient use
6. Dacron or rayon flexible nasopharyngeal swab (e.g., Copan flocked swab)
7. Viral Transport Medium (VTM) or M-4

Collection

1. If a patient has much mucus in the nose, this can interfere with the collection of cells. Either ask the patient to use a tissue to gently clean out visible nasal mucus or clean the nostril yourself with a cotton swab.
2. Seat the patient comfortably. Tilt the patient's head back slightly to straighten the passage from the front of the nose to the nasopharynx to make insertion of the swab easier. Patient's head should be inclined from the vertical to about 70%. Note: Have patient sit with head against a wall as patients tend to gag and pull away during the procedure.
3. Insert the swab through one nostril straight back (not upwards) along the floor of the nasal passage until reaching the posterior wall of the nasopharynx. The distance from the nose to the ear gives an estimate of the distance the swab should be inserted. If resistance is encountered, try the other nostril; the patient may have a deviated septum
4. Rotate the swab gently to dislodge the columnar epithelial cells. Allow the swab to sit in place for 5-10 seconds.
5. Slowly withdraw the swab and place in the VTM tube. Break swab shaft at score line and place cap on tube.
6. Label the tube with the patient's first and last name, date and time of collection, and sample type
7. If two samples are required, repeat the process on the other nostril.
8. If a different patient sample is to be collected, remove gloves before collecting the sample from the second patient to ensure no cross contamination occurs.
9. Remove gloves, lab coat, respirator and wash hands
10. Refrigerate sample and transport to the laboratory on cold packs



Specimen Collection from the Posterior Nasopharynx

Image: Manual for the Surveillance of Vaccine-Preventable Diseases, 4th ed., 2008

CLIENT SERVICES MANUAL
Southern Nevada Public Health Laboratory

APPENDIX F
Nasal Swab Collection

Nasal Swab Collection for Pediatric Early Warning Sentinel Surveillance Program

Materials

1. Follow institution protocol for Personal Protection Equipment (PPE)
    a. At minimum, gloves should be worn
    b. Additional PPE may include eye protection/goggles, N-95 respirator, lab coat
2. Unscented facial tissue for patient use
3. Copan flocked swab
4. Viral Transport Media (VTM)

Collection

1. After washing hands, put on clean gloves and institution required PPE.
2. Ask the patient to clear nasal discharge by "blowing" his/her nose into unscented facial tissue paper (allow one attempt).
3. Twist the container cap to remove the Copan flocked swab.
4. Insert the Copan swab approximately 2 cm (approximately ¾ inches) into the naris.
5. Rotate the swab against the anterior nasal mucosa for 3 seconds.
6. Using the same swab, repeat for other naris.
7. Place the swab into the Viral Transport Media (VTM).
8. Swirl the swab in the VTM for a few seconds.
9. Break the swab at the molded break point.
10. Tightly screw the cap onto the VTM.

11. Label the VTM with patient's name and source. Place in specimen transport biohazard bag.
12. Complete the SNPHL test requisition and place in the pouch of specimen transport biohazard bag.
13. The VTM can remain at room temperature for up to four hours and then must be refrigerated until pickup by SNPHL courier.

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Southern Nevada Public Health Laboratory

APPENDIX G
New order of draw for phlebotomy

Phlebotomy Reminders

from the Center for Phlebotomy Education

The Order of Draw

Based on the CLSI venipuncture standard (GP41).
Draws conducted in this order prevent carryover and erroneous results.

1. Blood culture tubes or vials
2. Coagulation tubes (e.g., blue-top tubes)
3. Serum tube with or without clot activator or gel (e.g., red-, gold-, or speckle-top tubes)
4. Heparin tubes (e.g., green-top tubes)
5. EDTA tubes (e.g., lavender-top tubes)
6. Oxalate/fluoride tubes (e.g., gray-top tubes)

Tips for successful venipunctures

1. Keep the angle of insertion 30 degrees or less, or as low as possible.
2. Avoid side-to-side needle manipulation, especially in the area of the basilic vein where nerves and the brachial artery can be injured.
3. Survey the antecubital areas of both arms and select the safer median or cephalic veins over the basilic vein whenever possible.
4. Observe for both superficial bleeding and hematoma formation prior to bandaging a venipuncture site.
5. Do not leave the tourniquet on for longer than one minute prior to the puncture to avoid altering results.
6. Invert each tube 5–10 times immediately upon filling. Invert coag tubes 3–5 times.
7. Instruct patients to clench and hold their fist instead of pumping it, which falsely elevates some blood levels.
8. Do not rely on ID bracelets unless they are attached to the patient.
9. Tubes for routine chemistry tests should be centrifuged and serum separated from cells preferably within two hours of collection.

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Southern Nevada Public Health Laboratory

APPENDIX H
CT/GC Aptima Combo 2 specimen collection

Aptima® vaginal swab device
Patient collection procedure guide

Collection for vaginal swab specimens

Wash hands before starting. If you have any questions about this procedure, please ask your doctor, nurse, or care provider.

Partially peel open swab package and remove the swab. Do not touch the soft tip or lay the swab down. **If the soft tip is touched, laid down, or dropped, request a new Aptima vaginal swab specimen collection kit.** Hold swab, placing thumb and forefinger in the middle of the swab shaft over the black score line.

Carefully insert swab into the opening of the vagina, about two inches, and gently rotate swab for 10 to 30 seconds. Make sure swab touches the walls of the vagina so that moisture is absorbed by the swab. Withdraw swab without touching skin.

While holding the swab in your hand, unscrew the tube cap. Do not spill tube contents. **If the tube contents are spilled, request a new Aptima vaginal swab specimen collection kit.** Immediately place swab into transport tube so the black score line is at the top of the tube. Align the score line with the top edge of the tube and carefully break swab shaft. Swab will drop to bottom of the vial. Discard the top portion of the swab shaft.

Tightly screw cap onto tube.
Return tube as instructed by the care provider.

Hologic provides this collection procedure guide as a general informational tool only. It is not an alternative instruction or guideline of performance. It is the sole responsibility of the laboratory to read and understand the appropriate package insert and comply with applicable local, state and federal rules and regulations.

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SPECIMEN	COLLECTION INSTRUCTIONS

Female **Vaginal Swab** **Swabs need to be transported to the laboratory in the swab specimen transport tube at 2°C to 30°C within 60 days**	1. Remove excess mucus from the cervical and surrounding mucosa using a clean swab, not provided. Discard the swab 2. Insert the specimen collection swab (pink shaft swab) into the vaginal canal. Gently rotate the swab clockwise for 10-30 seconds in the vaginal canal to ensure adequate sampling. 3. Carefully withdraw the swab. Avoid any contact with the vaginal mucosa. 4. Remove the cap from the swab specimen transport tube and immediately place the specimen collection swab into transport tube so that the tip of the swab is visible below the tube label. 5. Carefully break the swab shaft against the side of the tube at the score line and discard the top portion of the swab shaft; use care to avoid splashing of contents. 6. Tightly screw the cap onto the tube. 7. Label tube with patient name, a medical record number, date, and time. Place tube in biohazard specimen bag and seal.
Male and Female **Urine** **Processed urine specimens must be transported to the laboratory at 2°C to 30°C within 30 days**	1. The patient should not have urinated for at least 1 hour prior to specimen collection. 2. Collect specimen in a sterile, plastic, preservative-free specimen collection cup. 3. Instruct patient to collect 20 to 30 ml of first-catch urine (the initial urine stream NOT mid-stream). Collection of larger volumes may reduce test sensitivity. 4. Label the collection cup with patient name, medical record number, date, and time. 5. Remove the cap and transfer 2 ml of urine into the urine specimen transport tube using a disposable pipette. The urine level should be between the two black fill lines on the tube (referred to as minimum and maximum fill lines). The urine level must not be below the minimum fill line or above the maximum fill line. 6. Tightly screw the cap onto the tube. This is now known as a processed urine specimen. 7. Label tube with patient name, a medical record number, date, and time. Place tube in biohazard specimen bag. Seal bag. Dispose of excess urine in an appropriate manner
Rectal Swab	1. Insert tip of Aptima Vaginal (pink) swab tip approximately 3-5 cm into the rectum. Rotate against the rectal wall at least three times. Swabs that are grossly contaminated with feces should be discarded and the collection repeated. 2. Insert swab completely into the transport tube. 3. Label the transport tube and store at 2-30°C. Transport to the lab within 60 days of collection.
Oropharyngeal (Throat) Swab	1. Prepare specimen collection materials: tongue depressor and Aptima Vaginal (pink) swab 2. Instruct patient to tilt head back, breathe deeply, open mouth wide and say “ah.” This serves to lift the uvula and aids in reducing the gag reflex. 3. Use a tongue depressor to gently depress the tongue and look for areas of inflammation and exudate (pus). 4. Carefully but firmly rub the swab over areas of pus or inflammation, tonsils and posterior pharynx. AVOID touching the swab top the tongue, teeth, roof of the mouth or inside of cheeks. 5. Remove swab carefully from the mouth. AVOID touching the swab top the tongue, teeth, roof of the mouth or inside of cheeks. 6. Insert swab completely into the transport tube. 7. Label the transport tube and store at 2-30°C. Transport to the lab within 60 days of collection.

Southern Nevada Public Health Laboratory
APPENDIX I

Submission of Reportable Disease Isolate from laboratories
Submission of Reportable Disease Specimens to Southern Nevada Public Health Laboratory (SNPHL)

Per Nevada Administrative Code (NAC) 441A.235, it is the duty of the director or other person in charge of the medical laboratory to submit microbiologic cultures, subcultures, culture-independent diagnostic tests (CIDTs) or other specimens of clinical material to the State Public Health Laboratory or other laboratory designated by the health authority for diagnosis, confirmation or further testing.

It is highly recommended that laboratories perform reflex cultures on specimens positive for CIDTs. These isolates are needed for epidemiologic investigations.

The SNPHL is a branch of the Nevada State Public Health Laboratory and has been designated by the Southern Nevada Health District (SNHD) to receive the following specimens from Clark County laboratories:

Isolates listed in bold require immediate call to SNPHL at (702) 759 1020 to arrange for pickup	
Acinetobacter baumannii (resistant to imipenem, doripenem, meropenem)	*Legionella spp*
Bordetella pertussis or parapertussis	*Listeria monocytogenes*
****Bacillus spp* (non-motile and non-hemolytic)**	*Mycobacterium spp* culture or CIDT
****Brucella spp***	***Neisseria gonorrhea*** (disseminated, severe, resistant to cephalosporin or azithromycin)
****Burkholderia mallei or pseudomallei***	***Neisseria meningitidis*** (sterile site)
Campylobacter spp culture or CIDT	*Plasmodium spp* (blood smears)
Candida auris culture or CIDT	*Pseudomonas* (resistant to imipenem, doripenem, or meropenem)
****Clostridium botulinum or tetani***	*Salmonella spp*
Corynebacterium diphtheriae	*Shiga-toxin producing E. coli* (STEC) positive isolate, broth, or CIDT
SARS-CoV-2 (CT value < 30)	*Shigella spp* culture or CIDT
** ***Coxiella burnetii***	*Vibrio spp* culture or CIDT
Enterobacteriaceae (resistant to imipenem, doripenem, ertapenem, or meropenem)	VISA/VRSA isolates
E. coli 0157:h7 culture or CIDT	****Yersinia pestis***
****Francisella tularensis***	*Yersinia spp* other than pestis
Haemophilus influenzae (sterile site)	

**** POSSIBLE SELECT AGENT**

- Sequester all culture materials
- Complete SNPHL Presumptive Select Agent chain of custody and requisition forms
- Contact SNPHL at (702) 759-1020 to arrange for pickup
- Package as Infectious Substance Category A

Isolate or Specimen Submission Procedure

• Complete customized SNPHL test requisition form for all submitted specimens. Include copy of patient demographic and work card indicating isolate identification and testing performed. If isolate is a possible select agent, the submitting laboratory must also complete a chain of custody form.

• Subculture organism to appropriate media slant or plate that supports organism growth, e.g. blood, chocolate or tryptic soy agar slant. Utilize specialized media for fastidious organism, e.g. Regan-Lowe for *Bordetella*; MTM for *Neisseria;* Campylobacter agar for *Campylobacter.* Label with patient's full name and/or ID number and date of subculture.
NOTE: if possible Select Agent do not wait for subculture, send original plates to SNPHL.

• Transport at room temperature in appropriate growth environment, e.g., CO_2 pack for *Neisseria* or Microaerophilic pouch for *Campylobacter*. Place all plates, slants, etc. in sealed biohazard bag. Organism should be received at SNPHL within 48 hours of subculture.

• Packaging of possible Select Agent isolates, *Mycobacterium* cultures and Shiga-toxin producing *E coli* (STEC) positive isolate or broth must conform to Department of Transportation (DOT) regulations for transport of Infectious Substances, Category A. Contact SNPHL for specific Category A packaging instructions.

• Contact SNPHL at (702) 759-1020 to arrange for courier service which is available Monday-Friday, 8 am to 3 pm (closed legal holidays). Special arrangements can be made for after hour's pickup.

• There is no charge to the submitting laboratory for reportable disease testing.

NOTE: SNPHL will provide pickup and testing for reportable disease isolates. The submitting laboratory is still responsible for reporting to the SNHD Office of Epidemiology at (702) 759-1300. For isolates that require immediate notification, please refer to SNHD Reportable Diseases, Conditions and Events document: http://www.southernnevadahealthdistrict.org/disease-reporting/disease-reporting.php .

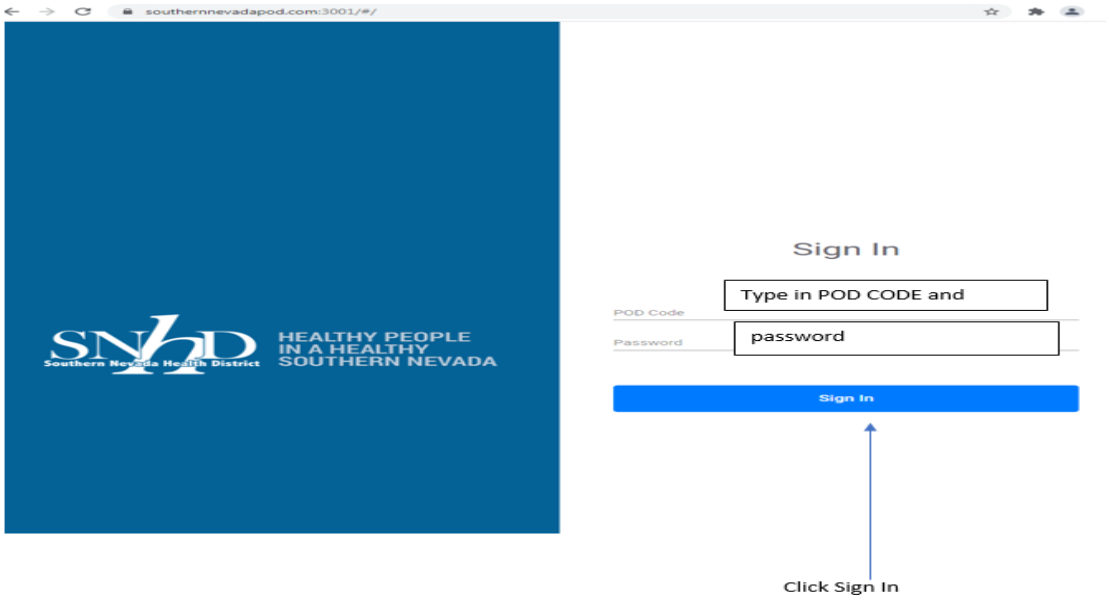
Reports

- SNPHL will provide a final written report for specimens submitted. Written reports will be delivered by courier, fax or mail as established by the submitting laboratory.
- For SNHD epidemiological statistics, surveillance and reports, please refer to the SNHD website link: http://southernnevadahealthdistrict.org/stats-reports/index.php.

Revised November 1, 2021

CLIENT SERVICES MANUAL
Southern Nevada Public Health Laboratory
APPENDIX J
Guidelines for using the Electronic COVID application

Go to: https://www.southernnevadapod.com:3001/#/



Fill in ALL Required Data Fields including the Symptom check.

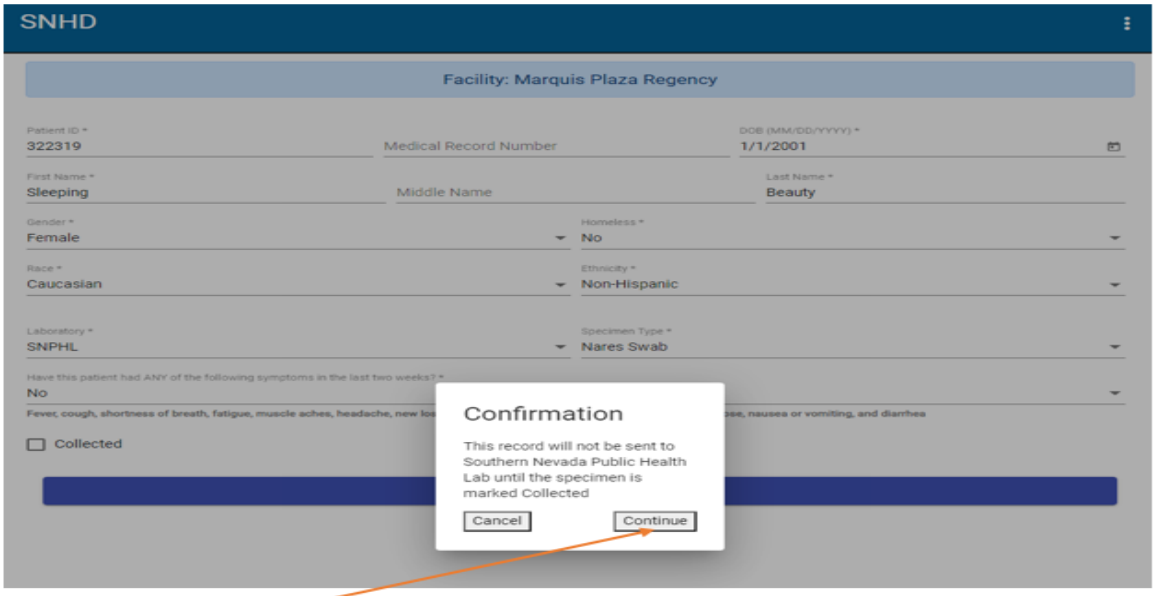
*IF sample is being collected on the SAME DAY as order is put in, CHECK the ☐ Collected box.

Verify that all your information is correct then click **SAVE.**

*IF pre-ordering is being done, leave the COLLECTED box blank.

Verify that all your information is correct then click **SAVE.**

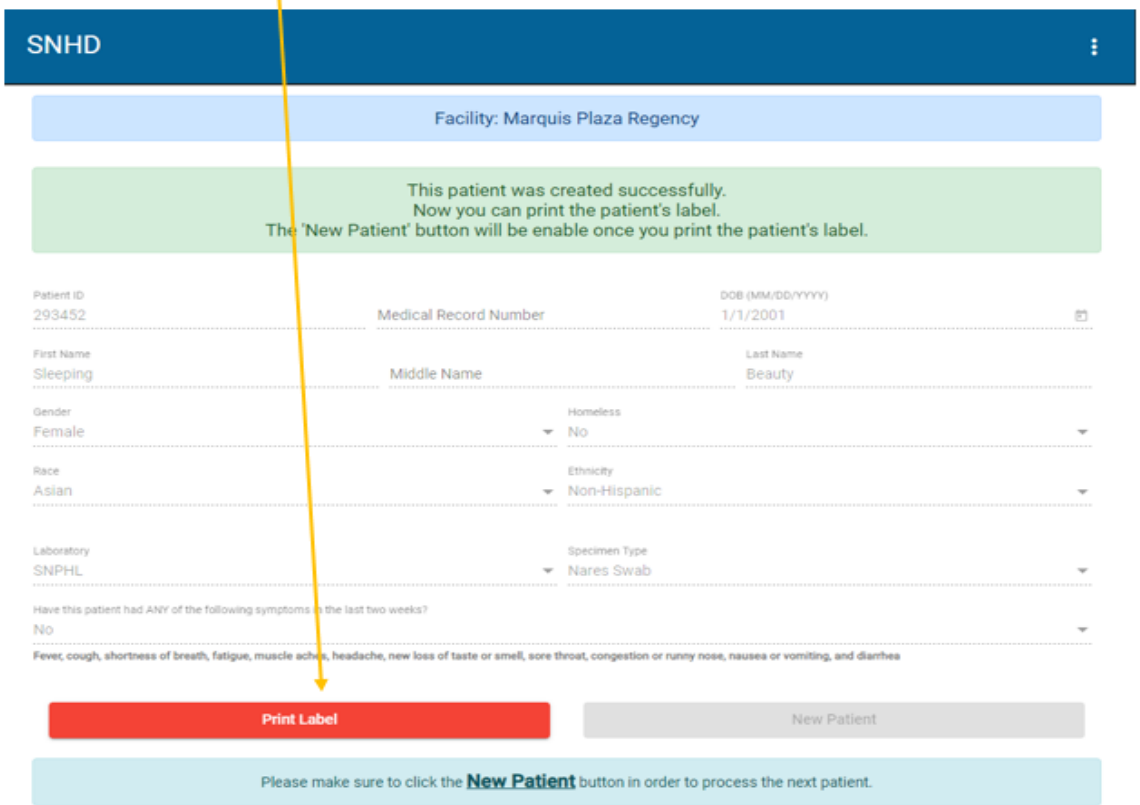
A window will pop up confirming that the specimen was NOT collected, and the order will not be sent to SNPHL.



Click on CONTINUE

A NEW WINDOW WILL POP UP SAYING PATIENT ORDER WAS CREATED SUCCESSFULLY.

CLICK TO PRINT LABELS.



A NEW WINDOW WILL POP UP SAYING PATIENT ORDER WAS CREATED SUCCESSFULLY.

CLICK TO PRINT LABELS.