

# Test Order

## Arthropod Identification

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<b>Performing Laboratory</b>	Santa Barbara County Public Health Laboratory
<b>Specimen Type</b>	Whole tick, mite, or louse
<b>Specimen Container</b>	Sterile collection container
<b>Minimum Volume</b>	N/A
<b>Specimen Handling (Collection Information)</b>	<b>Refrain from crushing or pulverizing the sample.</b> Collect tick, mite, or louse in a sterile collection container. An alternative, non-sterile collection container is also acceptable (i.e., small plastic bag, small Tupperware container).
<b>Transportation Information</b>	Contact the Public Health Laboratory at 805-681-5255 after collecting the sample and transport at ambient temperatures.
<b>Specimen Stability</b>	N/A
<b>Unacceptable Conditions</b>	Macerated organism that destroys the key identifying characteristics of <i>Ixodes pacificus</i> .
<b>CPT Codes</b>	87168
<b>Laboratory Forms</b>	<a href="#">Santa Barbara Public Health Laboratory Requisition</a>

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# Test Order

## Blood/Tissue Parasites

<b>Performing Laboratory</b>	Santa Barbara County Public Health Laboratory
<b>Specimen Type</b>	Blood
<b>Specimen Container</b>	Blood smeared slide
<b>Minimum Volume</b>	N/A
<b>Specimen Handling (Collection Information)</b>	<p><u>Thin Blood Films</u></p> <ol style="list-style-type: none"> <li>1. Using universal precautions, place a drop of fresh, whole blood onto a clean microscope slide about 0.5 inches from the end.</li> <li>2. Holding an additional clear glass slide at a 45 degree angle, place the slide in contact with the spot of blood on the first slide and smear the blood smoothly and evenly toward the opposite end of the slide.</li> <li>3. Label the slide with the thin smear and allow to air dry for at least 10 minutes.</li> <li>4. Fix the smear by dipping in absolute methanol and allowing it to dry in a vertical position. If necessary, the Santa Barbara County Public Health Laboratory can provide methanol fixative.</li> </ol> <p><u>Thick Blood Films</u></p> <ol style="list-style-type: none"> <li>1. Using universal precautions, place a drop of fresh, whole blood in the center of a clean glass microscope slide about 0.5 inches from the end.</li> <li>2. Using the corner of a clean glass slide or an applicator stick, spread the blood into a circle about the size of a dime.</li> <li>3. The smear should be of a thickness that allows newsprint to be barely readable through the smear. Add additional sample if the smear is too thin or spread the film thinner following the above procedures if the smear is too thick.</li> <li><b>4. Do not fix thick film slides.</b></li> </ol>
<b>Transportation Information</b>	Slides should be transported in a slide mailer/slide transport container or another secure container that will prevent the slides from breaking.
<b>Specimen Stability</b>	Transport to the laboratory after the slides have dried and packaged for transport.
<b>Unacceptable Conditions</b>	Thick blood films which have been fixed in methanol, smears made from blood containing anticoagulants, samples that are greater than 1 hour old when the smears are made, specimens that have been compromised during transport (i.e., broken slides), samples that are received unlabeled/mislabeled and/or without the appropriate Santa Barbara Public Health Laboratory requisition.
<b>CPT Codes</b>	N/A
<b>Laboratory Forms</b>	<a href="#">Santa Barbara Public Health Laboratory Requisition</a>

## Test Order

Chlamydia trachomatis/Neisseria gonorrhoeae (CT/GC) via Amplified Probe

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<b>Performing Laboratory</b>	Santa Barbara County Public Health Laboratory
<b>Specimen Type</b>	Urine; vaginal, rectal, pharyngeal, urethral, and/or cervical swabs.
<b>Specimen Container</b>	Aptima approved urine or unisex swab collection containers. Aptima approved collection containers can be provided to clinics upon request.
<b>Minimum Volume</b>	2 ml
<b>Specimen Handling (Collection Information)</b>	<p>This assay simultaneously detects the presence and/or absence of both Chlamydia trachomatis and Neisseria gonorrhoeae. When completing the Santa Barbara Public Health Laboratory requisition, please indicate what test/tests are being ordered.</p> <p><u>Urine</u> Instruct patient to provide a first-catch urine sample (approximately 20-30 ml) into a urine collection cup. Transfer 2 mls of urine into the approved specimen transport container. Use the "approved" pipette that is included with each urine collection kit. Aseptically remove the sample with the provided pipette and transfer into the urine collection container. The correct volume is added when the fluid level is between the black lines on the sample vessel. <b>DO NOT cover or obscure the designated fill lines while labeling the sample/samples.</b></p> <p><u>Swabs</u> Swab the desired location and place sample into the transport tube immediately after collection. Break off the handle of the swab protruding from collection container and then cap the sample. <b>Never pierce or puncture the metallic covering of the specimen cap.</b></p> <p><b>When collecting either swab or urine samples, NEVER remove/discard the liquid transport media that is provided in each container.</b></p>
<b>Transportation Information</b>	Urine must be transferred from the primary collection cup to the specimen transport tube within 24 hours of collection. Refrigerate the original sample and the aliquoted sample that is to be sent to the laboratory at 2-8°C. Transport swabs to the laboratory at 2-8°C as soon as possible.
<b>Specimen Stability</b>	<b>Specimens must be tested within 30 days of collection.</b> Fresh urine samples can be stored between 2- 30°C, but must be inoculated and refrigerated within 24 hours of initial collection.
<b>Unacceptable Conditions</b>	Transport tubes that are overfilled, under filled, not collected in the approved Aptima urine and/or unisex collection media, and samples that are received unlabeled/mislabeled and/or without the appropriate Santa Barbara Public Health Laboratory requisition.
<b>CPT Codes</b>	87491, 87591
<b>Laboratory Forms</b>	<a href="#">Santa Barbara Public Health Laboratory Requisition</a>

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# Test Order

## Clostridium botulinum Detection (Infant)

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<b>Performing Laboratory</b>	Send out Test: Infant Botulism Laboratory
<b>Specimen Type</b>	Stool, enema sample
<b>Specimen Container</b>	Sterile collection container
<b>Minimum Volume</b>	6 ml or 25 grams of stool (equivalent to a "small walnut")
<b>Specimen Handling (Collection Information)</b>	Stool or enema specimens from California inpatients or outpatients with suspected infant botulism (IB) may be submitted directly to the IBTPP laboratory. <b>Physicians seeking testing for their patients should first call the IBTPP on-call physician at (510) 231-7600 prior to specimen submission</b> to provide case information and review indications for testing. <b>Testing will not be initiated without prior clinical consultation with the IBTPP on-call physician.</b>

**Do not use containers containing fixatives or preservatives.** If spontaneously passed stool is difficult to obtain (i.e., due to constipation), attempt to collect stool in the rectal vault via gentle digital examination. If no stool can be obtained digitally, do not wait for a spontaneous bowel movement and collect a sample via enema using the following procedures.

1. Attach a 12 to 16 French, red rubber (Robinson) catheter to a tapered, catheter-tip syringe.
  2. Trim catheter tip to enlarge hole.
  3. Lubricate the catheter tip with petroleum jelly or equivalent and insert into distal colon.
  4. The volume of sterile, non-bacteriostatic water to use should be a bedside clinical decision based on the patient's body mass.
  5. Inject up to 30 ml of sterile, non-bacteriostatic water slowly into the distal colon and maintain catheter in rectum. **Note that a minimum volume of 6 ml is required for accurate diagnostic analysis.**
  6. Wait approximately 3 minutes and then draw enema effluent into the syringe.
  7. Have an assistant hold a sterile collection container under the anus during this time to collect any expelled material.
  8. Expel all fluid collected in the syringe into the same sterile container.
  9. Tightly seal the lid. Properly label the container with patient's name, date of birth, and the date and time of collection.
  10. If more than 5 ml of water is retained in the colon, exert gentle pressure onto left lower abdomen (with your hand or with infant's knee to abdomen) to aid in excretion and to minimize intestinal absorption of water.
  11. Send the enema specimen to your laboratory with instructions to keep the sample refrigerated and to expedite shipment to the appropriate botulism diagnostic laboratory. Retain all subsequent
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# Test Order

## Clostridium botulinum Detection (Infant)

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stool specimens and have your laboratory store the samples in their refrigerator until a diagnosis has been established by the appropriate laboratory. **Please do not send extra stool specimens unless requested.**

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### Transportation Information

1. **Keep the specimen refrigerated at 2-8°C at all times. Do not freeze.**
2. Tightly seal cap on collection container. Package the primary container of stool or enema in a secondary, leak-proof container (e.g., a zip-top specimen bag).
3. Place the [Infant Botulism Diagnostic Testing Specimen Submission Form](#) in a separate "requisition" pouch or second specimen bag.
4. Follow the International Air Transport Association (IATA) regulations; package the specimen in a Styrofoam box with one or more cold-packs. **Do not use dry-ice.** Label box with a UN 3373 "Biological Substance Category B" label.
5. **Send specimens directly to the California Department of Public Health** (for California patients only). Do not send through your local county public health laboratory as this will delay testing.
6. **Do not delay shipping.** Expedite specimen shipment by using a local courier for same day delivery before 2 PM or by using a major courier service for "priority overnight" delivery. **Packages should be shipped for overnight delivery Monday through Thursday only.** The Infant Botulism Laboratory does not accept deliveries on Saturday or Sunday.

Address the package using the exact information below:

*Infant Botulism Laboratory - IBTPP  
California Department of Public Health  
Specimen Receiving, Room B106  
850 Marina Bay Parkway  
Richmond, CA 94804*

For further questions, please contact the Infant Botulism Treatment and Prevention Program Laboratory at (510) 231-7676; Fax: (510) 231-7679

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### Specimen Stability

Send immediately to Infant Botulism Laboratory

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### Unacceptable Conditions

Samples that have not been preapproved or are missing the required submittal materials requested by the Infant Botulism Laboratory. Unlabeled, frozen, unrefrigerated, and/or samples that have surpassed 72 hours since the time of collection.

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### CPT Codes

N/A

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### Laboratory Forms

[Santa Barbara Public Health Laboratory Requisition](#),  
[Infant Botulism Diagnostic Testing Specimen Submission Form](#)

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## Test Order

### Colilert 18 and Enterolert (Recreational Water)

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<b>Performing Laboratory</b>	Santa Barbara County Public Health Laboratory
<b>Specimen Type</b>	Ocean and/or other recreational/raw water sources
<b>Specimen Container</b>	Polystyrene collection container with pre added sodium thiosulfate
<b>Minimum Volume</b>	100 ml
<b>Specimen Handling (Collection Information)</b>	Sampling locations for recreational areas should reflect water quality within the entire recreational zone. Collect samples in the swimming area from a uniform depth of approximately one meter. To obtain baseline quality data on marine and estuarine bathing water, include sampling at low, high, and ebb tides. Sampling frequency should be directly related to the peak bathing period(s). With a polystyrene collection container with pre added sodium thiosulfate obtained from the laboratory, unwrap the container from its packaging and collect sample by submerging the container to a depth of approximately one meter. Refrain from collecting debris (i.e., seaweed, sand, fecal matter) in the collection container. Recap the sample and transport to the laboratory in a cooler (at 2-8°C) with icepacks. <b>Samples must be transported to the laboratory within six hours of the initial collection.</b> Each sample must be accompanied by a requisition specifying what test methodology should be used. Mark the fields for Colilert 18 when interested in enumerating total coliforms and E. coli. Specify Enterolert when bacteria from the genus Enterococcus are of interest.
<b>Transportation Information</b>	Transport to the laboratory at 2-8°C no more than six hours after initial collection. When transporting specimens, ice packs are preferred over ice. When using ice, avoid direct contact with samples by using plastic packing materials.
<b>Specimen Stability</b>	Six hours after collection, eight hours total.
<b>Unacceptable Conditions</b>	Samples that exceed the six and/or eight hour collection window, specimens that are not collected in the approved polystyrene collection containers with pre added sodium thiosulfate and those that are filled below the 100 ml line inscribed on each container, samples that are received unlabeled/mislabeled and/or without the appropriate Santa Barbara Public Health Laboratory requisition.
<b>CPT Codes</b>	08020, 08022
<b>Laboratory Forms</b>	<a href="#">Recreational/Raw Water Test Request (Colilert 18 and Enterolert)</a>

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# Test Order

## Colilert 24 (Potable Water)

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<b>Performing Laboratory</b>	Santa Barbara County Public Health Laboratory
<b>Specimen Type</b>	Potable "drinking" water
<b>Specimen Container</b>	Polystyrene collection container with pre added sodium thiosulfate
<b>Minimum Volume</b>	100 ml
<b>Specimen Handling (Collection Information)</b>	<b>Each sample must be filled to the 100-ml line inscribed on the container.</b> Sampling from locations with a tap that is frequently used, that is clean, and that is at least 1.5 feet above the ground are preferred. Allow water to run for 2-3 minutes prior to collection. Collect each sample(s) using a polystyrene collection container with pre added sodium thiosulfate provided by the laboratory. <b>Fill the sample to the 100 ml line</b> , tightly recap the sample, and transport to the laboratory in a cooler (at 2-8°C) with icepacks. <b>Samples must be transported to the laboratory within thirty hours of initial collection.</b> If you are unable to deliver the samples to the laboratory immediately after collection, collect the sample and hold at refrigerated temperatures. Each sample must be accompanied by a potable water requisition. Use the Colilert 24 methodology when interested in enumerating total coliforms and E. coli in your sample. Contact the Public Health Laboratory at 805-681-5255 for more detailed collecting instructions.
<b>Transportation Information</b>	<b>Transport to the laboratory at 2-8°C no more than thirty hours after initial collection.</b> When transporting specimens, ice packs are preferred over ice. When using ice, avoid direct contact with samples by using plastic packing materials.
<b>Specimen Stability</b>	Up to thirty hours after initial sample collection
<b>Unacceptable Conditions</b>	Samples that exceed the thirty hour collection window, specimens that are not collected in polystyrene collection containers with pre added sodium thiosulfate and those that are filled below 100 ml, samples with excess chlorine, samples that are received unlabeled/mislabeled and/or without the appropriate Santa Barbara Public Health Laboratory requisition.
<b>CPT Codes</b>	8005
<b>Laboratory Forms</b>	<a href="#">Potable Water Bacteriology Test Request (Colilert 24)</a>

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## Test Order

Escherichia coli O157 (Shiga Toxin EIA)

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<b>Performing Laboratory</b>	Santa Barbara County Public Health Laboratory
<b>Specimen Type</b>	Stool or rectal swab placed in Gram Negative (GN) broth.
<b>Specimen Container</b>	Sterile collection container for raw stool samples. Pre-incubated GN broth with inoculated sample.
<b>Minimum Volume</b>	1 to 2 g, 1 to 2 ml, or one swab.
<b>Specimen Handling (Collection Information)</b>	Add 1 to 2 grams of stool to modified Cary-Blair transport media. Thoroughly homogenize the specimen by inversion and/or by vigorously shaking the container. <b>Unpreserved stool should be submitted only if the specimen can be delivered to the laboratory within 2 hours.</b> Rectal swabs should always be submitted in modified Cary-Blair transport medium.
<b>Transportation Information</b>	Transport to the laboratory as soon as possible at ambient/room temperature.
<b>Specimen Stability</b>	Up to 72 hours if preserved in modified Cary-Blair transport medium. 2 hours for raw stool.
<b>Unacceptable Conditions</b>	Specimens received in leaking transport container, diapers, dry specimens, specimens submitted in fixative or additive (i.e., formalin), specimens received in expired transport media or incorrect transport device, inappropriate specimen transport conditions (i.e., not in a C&S vial or in an overfilled/underfilled C&S vial), specimens received after prolonged delay in transport (e.g., typically more than 72 hours), specimens stored or transported frozen, samples with wooden shafted swab in transport device, specimens that are received unlabeled/mislabeled and/or without the appropriate Santa Barbara Public Health Laboratory requisition.
<b>CPT Codes</b>	87427
<b>Laboratory Forms</b>	<a href="#">Santa Barbara Public Health Laboratory Requisition</a>

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# Test Order

## Enteric Stool Culture

<b>Performing Laboratory</b>	Santa Barbara County Public Health Laboratory
<b>Specimen Type</b>	Stool
<b>Specimen Container</b>	Raw stool, stool pre-inoculated into modified Cary-Blair (C&S) transport media, pre-isolated differential media (typically for confirmation)
<b>Minimum Volume</b>	1 to 2 g, 1 to 2 ml
<b>Specimen Handling (Collection Information)</b>	<b>When ordering this test, please indicate presumptive organism for isolation (e.g., Salmonella, Shigella, Campylobacter, Yersinia and Vibrio).</b> Samples should adhere to the "fill line" limit inscribed on each collection container. Add 1 to 2 grams of stool to modified Cary-Blair transport media. Thoroughly homogenize the specimen by inversion and/or by vigorously shaking the container. <b>Unpreserved stool should be submitted only if the specimen can be delivered to the laboratory within 2 hours.</b> Rectal swabs should always be submitted in modified Cary-Blair transport medium. <b>In the event a Salmonella/Shigella dual infection is suspected, collect two stool samples, refrigerating the specimen for the cultivation of Salmonella and preserving the stool for the cultivation of Shigella at room temperatures.</b> If the patient is having troubles producing enough stool to meet the minimum collection requirements for two C&S containers, collect one sample, designate on the Santa Barbara County Public Health Laboratory Requisition that <b><u>BOTH</u></b> Salmonella and Shigella should be isolated, and transport to the laboratory within 24 hours at ambient temperatures.
<b>Transportation Information</b>	<b><u>DO NOT</u> refrigerate samples that are intended for the isolation of Shigella.</b> For all other organisms (e.g., Salmonella, Campylobacter, Yersinia, and Vibrio), refrigerate and/or store samples at 2-8°C. Transport to the laboratory as soon as possible.
<b>Specimen Stability</b>	Up to 96 hours if preserved in modified Cary-Blair transport medium. 2 hours for raw stool samples.
<b>Unacceptable Conditions</b>	Samples that have been contaminated with urine and/or water, those that are filled above or below indicated fill line, frozen samples/samples transported on dry ice, specimens presumptively containing Shigella that have been refrigerated, specimens greater than 96 hours old, unpreserved stool that is greater than 2 hours old, samples collected in ECOFIX preservative, formalin, or PVA fixative, and specimens that are received unlabeled/mislabeled and/or without the appropriate Santa Barbara Public Health Laboratory requisition
<b>CPT Codes</b>	87045
<b>Laboratory Forms</b>	<a href="#">Santa Barbara Public Health Laboratory Requisition</a>

# Test Order

## GeneXpert (MTB/RIF)

<b>Performing Laboratory</b>	Santa Barbara County Public Health Laboratory
<b>Specimen Type</b>	Varies. Please see <i>Mycobacteriology (AFB culture and smear)</i> requirements for a comprehensive list of sample options.
<b>Specimen Container</b>	Sterile collection container (100 ml Falcon Tube preferred)
<b>Minimum Volume</b>	Sterile samples: 1 ml; nonsterile samples: 0.5 ml.
<b>Specimen Handling (Collection Information)</b>	<p><b>When this test is ordered, reflex tests may be performed and charged.</b> The GeneXpert is a reflex test associated with the AFB culture and smear. The assay may be requested by providers, but it is never run independently of the AFB culture and smear. Positive smears will automatically be reflexed to include a GeneXpert. For a more comprehensive list of sample sources and collection procedures, consult the test <i>Mycobacteriology (AFB culture and smear)</i>.</p> <p><b>Sterile samples being analyzed using this methodology, including the procedures for the AFB culture and smear, require a minimum volume of 2.5 ml. For non-sterile samples, both procedures require a minimum volume of 3 mls.</b> The latter sample volumes are the minimum requirements needed for primary and reflex testing methodologies. These minimum volumes will not permit retesting.</p> <p>At this time, the Santa Barbara Public Health Laboratory is unable to analyze samples from pediatric patients (ages 0-17) without qualification.</p>
<b>Transportation Information</b>	Refrigerate at 2-8°C and transport to the laboratory as soon as possible. For more detailed source dependent transportation information, consult the test <i>Mycobacteriology (AFB culture and smear)</i> .
<b>Specimen Stability</b>	Up to seven days refrigerated.
<b>Unacceptable Conditions</b>	Samples that have exceeded the seven day holding period, specimens contaminated/diluted with other liquid substances, specimens transported in gel/anaerobic collection containers, frozen samples/samples transported on dry ice, and specimens that are received unlabeled/mislabeled and/or without the appropriate Santa Barbara Public Health Laboratory requisition
<b>CPT Codes</b>	87556
<b>Laboratory Forms</b>	<a href="#">Santa Barbara Public Health Laboratory Requisition</a>

## Test Order

### Hepatitis B Surface Antigen (Neutralization only)

<b>Performing Laboratory</b>	Santa Barbara County Public Health Laboratory
<b>Specimen Type</b>	Serum
<b>Specimen Container</b>	Serum gel, red top
<b>Minimum Volume</b>	1.5 ml
<b>Specimen Handling (Collection Information)</b>	<p>Performance of the assay has not been established with cord blood, neonatal specimens, cadaveric specimens, heat-inactivated specimens, or body fluids other than serum. This test is only orderable by laboratory and/or the Santa Barbara County Public Health Department (SBCPHD) Clinic staff based on a positive Hepatitis B Surface Antigen EIA result.</p> <p>Collect sample using approved venipuncture procedures. Allow the sample to clot for thirty minutes vertically. Centrifuge the sample for 10 minutes at 2000-2500 revolutions per minute (rpm). Decant the serum into a sterile aliquot tube appropriate for the anticipated method of transportation. Deliver to the laboratory at refrigerated temperatures. When centrifugation is not possible, obtain the sample following the above procedures and transport to the laboratory at temperatures between 2-8°C.</p>
<b>Transportation Information</b>	Transport to the laboratory at 2-8°C as soon as possible.
<b>Specimen Stability</b>	Can be stored at 2-8°C for up to seven days after a positive EIA result. If sample storage is projected to surpass seven days before neutralization, hold sample at -70°C until samples can be transported to the laboratory. <b>Samples will not be used if they have incurred more than five freeze/thaw cycles.</b> Mix samples thoroughly after thawing. Transport at 2-8°C. <b>Specimens can be held up to thirty days if frozen.</b>
<b>Unacceptable Conditions</b>	Specimens that are extensively hemolyzed, samples that have exceeded five freeze/thaw cycles and/or those that have not been stored at -20°C to -70°C if hold time surpasses seven days, specimens that are received unlabeled/mislabeled and/or without the appropriate Santa Barbara Public Health Laboratory requisition.
<b>CPT Codes</b>	87341
<b>Laboratory Forms</b>	<a href="#">Santa Barbara Public Health Laboratory Requisition</a>

## Test Order

### HIV Antigen/Antibody EIA

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<b>Performing Laboratory</b>	Santa Barbara County Public Health Laboratory
<b>Specimen Type</b>	Serum
<b>Specimen Container</b>	Serum gel, red top
<b>Minimum Volume</b>	1 ml
<b>Specimen Handling (Collection Information)</b>	<b>When this test is ordered, reflex tests may be performed and charged.</b> Collect sample using approved venipuncture procedures. Allow the sample to vertically clot for thirty minutes. Centrifuge the sample for 10 minutes at 2000-2500 revolutions per minute (rpm). Decant the sample into a sterile aliquot tube appropriate for the anticipated method of transportation. Deliver to the laboratory at refrigerated temperatures. When centrifugation is not possible, obtain the sample following the above procedures and transport to the laboratory at temperatures between 2-8°C.
<b>Transportation Information</b>	Specimens not delivered to the laboratory immediately following collection should be refrigerated at 2° - 8° C.
<b>Specimen Stability</b>	Room temperature for 48 hours; refrigerated or frozen for 14 days. If frozen, hold sample at -20°C to -70°C. Sample should not exceed five freeze thaw cycles.
<b>Unacceptable Conditions</b>	Specimens that are extensively hemolyzed , samples that have exceeded five freeze/thaw cycles and/or those that have not been stored at -20°C to -70°C if hold time surpasses fourteen days, specimens that are received unlabeled/mislabeled and/or without the appropriate Santa Barbara Public Health Laboratory requisition.
<b>CPT Codes</b>	86703, 86689
<b>Laboratory Forms</b>	<a href="#">Santa Barbara Public Health Laboratory Requisition</a>

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# Test Order

## Influenza PCR

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<b>Performing Laboratory</b>	Santa Barbara County Public Health Laboratory
<b>Specimen Type</b>	Nasal pharyngeal (NP) swab
<b>Specimen Container</b>	Viral transport media (VTM)
<b>Minimum Volume</b>	2.5 ml
<b>Specimen Handling (Collection Information)</b>	<p>Collect NP specimen using a flexible swab. Obtain sample by swabbing back and forth over mucosa surface to maximize recovery of cells. <b>Swab must be placed in viral transport media before it can be delivered to the laboratory.</b> Transfer swab into viral transport media and break the plastic end of the swab. Discard the plastic tip that was broken off in the latter step. Cap the vial and gently shake for at least 10 seconds to aid in the preservation of the sample. Label the container with patient's name (last, first), date of birth, date and time of collection, and type of specimen (i.e., NP swab). Refrigerate the specimen and transport to the laboratory as soon as possible.</p> <p>For facilities collecting influenza samples for hospitalized/"mandated" patients and/or for Public Health surveillance purposes, only complete the form <a href="#">Mandated, Inpatient Testing Requisition</a> <b>OR</b> <a href="#">Surveillance, Outpatient Testing Requisition</a>.</p>
<b>Transportation Information</b>	Refrigerate and transport to the laboratory at 2° - 8° C as soon as possible.
<b>Specimen Stability</b>	Refrigerated samples: 7 days; frozen samples: 7 days. <b>Refrigerated samples are preferred over frozen specimens.</b>
<b>Unacceptable Conditions</b>	The following collection methods are not viable for the recovery of influenza: E-swab, calcium alginate-tipped swab, wood swab, dry swab, or transport swab containing gel. Samples collected using the aforementioned methods will not be accepted and a recollect will be requested. Specimens that are received unlabeled/mislabeled and/or without the appropriate Santa Barbara Public Health Laboratory requisition.
<b>CPT Codes</b>	N/A
<b>Laboratory Forms</b>	<a href="#">Mandated, Inpatient Testing Requisition</a> , <a href="#">Surveillance, Outpatient Testing Requisition</a> .

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# Test Order

## Measles

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<b>Performing Laboratory</b>	Send out Test: Viral and Rickettsial Disease Laboratory (VRDL)
<b>Specimen Type</b>	Less than seven days from rash onset, collect a throat swab. Greater than seven days from rash onset, collect urine and blood.
<b>Specimen Container</b>	Throat swab: Dacron (synthetic) swab collected into viral transport media (VTM). Urine: sterile collection container. Blood: Serum separator or red top.
<b>Minimum Volume</b>	Throat Swab: 2.5 ml. Urine: 50 ml. Blood: 2 ml.
<b>Specimen Handling (Collection Information)</b>	<u>Throat Swab</u> Swab throat and inoculate into viral transport media (VTM). Do not discard or pour off any volume of the VTM solution.  <u>Urine</u> Collect 50-100 ml of urine into a sterile tube that will allow centrifugation or collect in a sterile specimen container. If the sample is unable to be delivered to the laboratory within 24 hours, centrifuge urine at 2500 revolutions per minute (rpm) for 15 minutes at 4° C. Resuspend the pellet in 1-2 ml of VTM. Refrigerate at 2° - 8° C until courier pick up.  <u>Blood</u> Draw blood in serum separator or red top tube. Spin the specimen and remove serum. Refrigerate at 2° - 8° C until courier pick up.  <b>Collect all required specimens at the time of the patient's visit. Do not send the patient home and plan to collect specimens in the future.</b> If initial IgM testing is negative and measles is strongly suspected, a convalescent serum sample should be collected 2-4 weeks after symptom onset.
<b>Transportation Information</b>	Transport all required specimens at 2° - 8° C.
<b>Specimen Stability</b>	Transport to the laboratory as soon as possible.
<b>Unacceptable Conditions</b>	Samples that are received in cracked or leaking containers, samples that do not meet the minimum specimen requirements, samples that deviate from the approved transportation conditions (i.e., samples not transported and/or held at refrigerated temperatures for extended periods of time), specimens that are received unlabeled/mislabeled and/or without the appropriate Santa Barbara Public Health Laboratory requisition.
<b>CPT Codes</b>	N/A
<b>Laboratory Forms</b>	<a href="#">Santa Barbara Public Health Laboratory Requisition</a> , <a href="#">VRDL General Purpose Specimen Submittal Form</a>

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# Test Order

Mycobacteriology (AFB culture and smear)

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<b>Performing Laboratory</b>	Santa Barbara County Public Health Laboratory
<b>Specimen Type</b>	<ol style="list-style-type: none"><li>1. Abscesses and Wounds</li><li>2. Blood</li><li>3. Body Fluids</li><li>4. Bone Marrow</li><li>5. Cerebrospinal Fluid (CSF)</li><li>6. Gastric Lavage</li><li>7. Tissue</li><li>8. Respiratory specimens (Bronchoalveolar lavage fluids, bronchial washing, sputum, tracheal aspirates)</li><li>9. Stool</li><li>10. Urine</li></ol>
<b>Specimen Container</b>	Sterile container (100 ml Falcon Tube preferred), evacuated container, syringe.
<b>Minimum Volume</b>	2.5 ml
<b>Specimen Handling (Collection Information)</b>	<p><b>When this test is ordered, reflex tests may be performed and charged.</b></p> <p><u>Abscesses and Wounds</u> Collect sample using a culture transport swab (noncharcoal) Culturette. <b>Samples collected in charcoal or gel based media will not be accepted by the laboratory.</b> Before collecting specimen, wipe away excessive secretions and/or discharge. Obtain secretions or fluid from area of interest with sterile swab or via aspiration. If smear and culture are requested or if both a bacterial culture and mycobacterial culture are requested from the same collection location, collect an additional swab to maximize test sensitivity. For low volume samples, swab the area of interest and insert the swab into a sterile collection container with 2 ml of sterile DI water or 0.5% saline.</p> <p><u>Blood</u> Draw sample directly into a <i>Bactec Myco/F Lytic</i> blood culture bottle following all established venipuncture procedures to avoid cross contamination. <i>Myco/F Lytic</i> blood culture bottles can be provided to clinics upon request.</p> <p><u>Body Fluids</u> Obtain sample from area of interest and transfer into sterile, approved collection container.</p> <p><u>Bone Marrow</u> Obtain sample from area of interest and transfer into sterile, approved collection container. Do not mix samples to be tested for AFB with preservatives that may be necessary for other requested assays (i.e., Vital Transport Media (VTM)). Samples may be collected with</p>

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# Test Order

## Mycobacteriology (AFB culture and smear)

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containers containing lithium heparin, but unpreserved specimens are preferred.

### CSF

Perform a lumbar puncture collecting samples into pre-labeled CSF tubes (e.g., tubes one through four). Aliquot 1-2 ml into sterile collection container or send the contents of tube three to the Public Health Laboratory.

### Gastric Lavage

Following approved procedures, administer and aspirate a volume of fluid via an orogastric tube. Collect the contents in a sterile collection container and **neutralize the gastric sample within four hours using 100 mg of sodium bicarbonate per 5 to 10 mL of gastric wash.** Specimens should be tested using a pH strip prior to transportation to the laboratory. **An acceptable sample will be neutralized to a pH of 7.0-7.5.** Samples that arrive at the laboratory that are either excessively neutralized or inappropriately neutralized (i.e., pH 6.2) will not be tested.

### Tissue

Excise a fresh tissue sample from area of interest. When applicable, excise portions of necrotic tissue for analysis. Homogenize tissue with sterile DI water or 0.5 % saline and transfer into Falcon tube. **If homogenization prior to delivery to the laboratory is not possible, add 1-2 ml of sterile DI water or 0.5 % saline to prevent sample from desiccating.** Samples that are not homogenized prior to delivery will be homogenized by the laboratory at an additional cost.

### Respiratory specimens

Collect three respiratory specimens for patients with clinical and chest X-ray findings indicating tuberculosis. **These three specimens must be collected at 8 to 24 hour intervals (when possible, a 24 hour interval is preferred).** At least one of the three samples should include a first morning specimen.

### Stool

Obtain a random stool sample and transfer contents into sterile collection container.

### Urine

Obtain a random urine specimen and transfer sample into sterile collection container.

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### **Transportation**

For all samples **except** those collected into the *Bactec Myco/F Lytic*

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## Test Order

### Mycobacteriology (AFB culture and smear)

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<b>Information</b>	<p>culture vial: refrigerate at 2-8°C and transport to the laboratory as soon as possible.</p> <p>For samples collected using the <i>Bactec Myco/F Lytic</i> culture vial: transport specimens at ambient temperatures. Deliver to the laboratory as soon as possible without exceeding 72 hours</p>
<b>Specimen Stability</b>	<p>For all samples <b>except</b> those collected into the <i>Bactec Myco/F Lytic</i> culture vial: up to seven days refrigerated.</p> <p>For samples collected using the <i>Bactec Myco/F Lytic</i> culture vial: Up to 72 hours.</p>
<b>Unacceptable Conditions</b>	<p>Specimens received leaking or in a broken transport container, samples collected in gel or charcoal based transport media, specimens that have surpassed the seven day testing window, samples received in blood culture bottles other than those approved for the recovery of mycobacteria, Myco/F Lytic culture bottles that have exceeded 72 hours since the time of collection, and samples that are received unlabeled/mislabeled and/or without the appropriate Santa Barbara Public Health Laboratory requisition.</p>
<b>CPT Codes</b>	87206, 87015, 87116
<b>Laboratory Forms</b>	<a href="#">Santa Barbara Public Health Laboratory Requisition</a>

# Test Order

Neisseria gonorrhoeae via culture (NGC)

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<b>Performing Laboratory</b>	Santa Barbara County Public Health Laboratory
<b>Specimen Type</b>	<ol style="list-style-type: none"><li>1. Endocervical swab</li><li>2. Urethral swab</li><li>3. Anorectal swab</li><li>4. Oropharyngeal swab</li><li>5. Conjunctiva</li><li>6. Samples for direct examination (i.e., pus)</li></ol>
<b>Specimen Container</b>	Dacron or calcium alginate swabs, Amies transport media with charcoal, specimens pre-inoculated on Modified Martin-Lewis agar, Jembec transport system.
<b>Minimum Volume</b>	Entire contents of swab
<b>Specimen Handling (Collection Information)</b>	<p><b>Do not use any disinfectant before collecting the specimen and avoid contaminating the swab with vaginal flora.</b> Swab the endocervical canal laterally and leave the swab in the cervix for 10 – 30 seconds.</p> <p><u>Urethral Swab</u> Collect male urethral specimens at least 1 hour after the patient has urinated. Purulent discharge can be collected directly onto the swab. If there is no discharge, scrape the mucosa of the anterior urethra with a sterile swab by inserting a male urethral swab 2 cm into the urethra. Gently rotate the swab upon its removal.</p> <p><u>Anorectal Swab</u> Insert swab 4 to 5 cm into the anal canal moving the inserted swab laterally to perform the collection. If fecal contamination occurs, discard the swab and recollect the specimen.</p> <p><u>Oropharyngeal Swab</u> Swab the posterior pharynx and the region of the tonsillar crypts.</p> <p><u>Conjunctiva</u>  Swab the site of conjunctival exudate.</p> <p><u>Samples for direct examination</u> Collect discharge on swabs.</p>
<b>Transportation Information</b>	<b>Do not refrigerate sample.</b> Inoculated Thayer-Martin plates should be placed in a CO <sub>2</sub> incubator or candle jar within 15 minutes of collection. For Jembecs, remove a CO <sub>2</sub> -generating tablet from its foil wrapper and place in the specially designed well in the plate. Place inoculated plates in the ziplock bag and seal the bag. Jembecs should

## Test Order

Neisseria gonorrhoeae via culture (NGC)

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	be pre-incubated at 35°C, if possible, prior to shipment at room temperature.
<b>Specimen Stability</b>	24 hours for specimens inoculated into Amies transport media with charcoal. 20 minutes for fresh, unpreserved specimens.
<b>Unacceptable Conditions</b>	Inappropriately collected specimens received, refrigerated samples, specimens received after prolonged delay (usually more than 72 hours), specimens received in expired transport container, specimens that are received unlabeled/mislabeled and/or without the appropriate Santa Barbara Public Health Laboratory requisition.
<b>CPT Codes</b>	87081
<b>Laboratory Forms</b>	<a href="#">Santa Barbara Public Health Laboratory Requisition</a>

# Test Order

## Norovirus PCR

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<b>Performing Laboratory</b>	Santa Barbara County Public Health Laboratory
<b>Specimen Type</b>	Stool
<b>Specimen Container</b>	Sterile collection container
<b>Minimum Volume</b>	1 gram; 5 ml
<b>Specimen Handling (Collection Information)</b>	Collect fresh stool and submit in sterile collection container. Fresh, "acute" stool that is obtained 3-5 days from onset is preferred. Depending on the consistency of the sample, collect 1 gram to 5 ml of sample that is the representative portion of diarrhea/stool. Note that visibly formed stool is not typically consistent with Norovirus gastrointestinal disease and should not be submitted for testing. Other enteric workups can be performed at the request of the provider.
<b>Transportation Information</b>	If Norovirus is suspected, notify the laboratory before delivering the samples. <b>Norovirus testing will only be performed if/when "outbreak conditions" are met.</b> Outbreak conditions are satisfied when three or more individuals are affected and demonstrate similar, if not identical symptoms, originating from a common source (i.e., restaurant or healthcare facility). Transport samples to the laboratory immediately after sample collection. Each sample must be transported at 2° - 8° C and <b>must be accompanied by a chain of custody form.</b> In addition to the chain of custody form, <b>each specimen must be submitted with its own Santa Barbara County Public Health Laboratory requisition.</b>
<b>Specimen Stability</b>	2-3 weeks refrigerated.
<b>Unacceptable Conditions</b>	Transport containers that are over or underfilled, overly formed (e.g., non-watery stool), samples submitted that do not follow established "outbreak" criteria, samples that are received unlabeled/mislabeled and/or without the appropriate Santa Barbara Public Health Laboratory requisition and chain of custody forms.
<b>CPT Codes</b>	N/A
<b>Laboratory Forms</b>	<a href="#">Santa Barbara Public Health Laboratory Requisition</a> , <a href="#">Foodborne Illness Chain of Custody Form</a> .

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# Test Order

## Quantiferon TB Gold Plus

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<b>Performing Laboratory</b>	Santa Barbara County Public Health Laboratory
<b>Specimen Type</b>	Whole blood, serum
<b>Specimen Container</b>	Qiagen approved QFT Gold Plus evacuated containers with Nil, TB1 antigen, TB2 antigen, and Mitogen
<b>Minimum Volume</b>	0.8 to 1.2 ml in each collection container
<b>Specimen Handling (Collection Information)</b>	<p>The Quantiferon in-tube test is used to detect the presence of active or latent tuberculosis. Kits will be provided by the Public Health Laboratory and will contain the following: grey, green, yellow, and purple top evacuated containers. Using approved venipuncture techniques collect approximately 1 ml of blood into each collection container. Since the evacuated containers draw blood relatively slowly, keep the tube on the needle for 2-3 seconds once the tube appears to have completed filling. The latter will ensure the correct volume is drawn. If a "butterfly needle" is being used to collect a sample, a "purge" tube should be used to ensure that the tubing is filled with blood prior to the QFT tubes being filled. <b>Immediately after filling, gently invert all samples for 5 seconds (approximately 10 inversions).</b> Ensure the entire inner surface of each tube has been coated with blood. Improper shaking will result in frothing of blood. <b>Specimens not delivered to the laboratory on the day of collection must be incubated upright at 37°C for 16 to 24 hours.</b> The incubator does not require CO<sub>2</sub> or humidification. After incubation at 37°C, blood collection tubes may be held between 4 - 27°C (40 - 81°F) for up to 3 days prior to centrifugation. After incubation, harvesting of serum is facilitated by centrifuging tubes for 15 minutes at 2000 to 3000 revolutions per minute (rpm). The gel plug will separate the cells from the serum. If separation does not occur, the tubes should be centrifuged again at a higher speed.</p> <p><b>DO NOT cover or obscure the designated fill line while labeling the samples.</b> This fill line is a thick black "bars" that should be used to check the volume of each sample before they are delivered to the laboratory. The lower limit of the fill line designates 0.8 ml and the upper limit represents 1.2 ml.</p> <p><b>If incubated prior to receiving/processing by the laboratory, please clearly indicate the date and time each sample was placed into the incubator, the temperature at which the samples were incubated, the date and time the samples were removed from the incubator, and the first and last name/initials of the healthcare provider that incubated each sample.</b></p>
<b>Transportation Information</b>	If incubated and centrifuged, store and/or transport to the laboratory at 2° - 8° C. If incubated without centrifugation, transport to the laboratory at ambient temperatures. <b>Samples that have not been</b>

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# Test Order

## Quantiferon TB Gold Plus

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	<b>incubated/centrifuged should never be transported at refrigerated temperatures.</b>
<b>Specimen Stability</b>	Non-incubated samples should be drawn and incubated within 16 hours of initial draw. Incubated samples must be centrifuged no more than 3 days after their 16-24 hour incubation period. Incubated and centrifuged samples can be held for up to 28 days at refrigerated temperatures.
<b>Unacceptable Conditions</b>	Specimens that are extensively hemolyzed, samples that are either underfilled or overfilled, those that do not follow the kit guidelines (i.e., omitting any of the required collection containers), samples that have been over or under incubated, un-incubated samples that have been transported at refrigerated temperatures, samples that are not incubated within 16 hours of initial draw, and samples that are received unlabeled/mislabeled and/or without the appropriate Santa Barbara Public Health Laboratory requisition.
<b>CPT Codes</b>	86480
<b>Laboratory Forms</b>	<a href="#">Santa Barbara Public Health Laboratory Requisition</a>

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# Test Order

## Rabies

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<b>Performing Laboratory</b>	Santa Barbara County Public Health Laboratory
<b>Specimen Type</b>	Deceased or decapitated animal
<b>Specimen Container</b>	For animals less than 5 pounds (i.e., bats): sterile collection container. For animals greater than 5 pounds, decapitated head in biohazard specimen transport bag. <b>Do not transport specimens for testing in red bags used for biohazardous waste.</b>
<b>Minimum Volume</b>	N/A
<b>Specimen Handling (Collection Information)</b>	<p>The Public Health Laboratory does not accept animals from private veterinarian offices or community members. If you are a local resident of Santa Barbara and suspect a rabies infection or have come into contact with a rabid animal, call Santa Barbara County Animal Services at 805-681-5285 to arrange testing. For individuals living in Lompoc or Santa Maria, please contact either Lompoc Animal Services at 805-736-2913 or Santa Maria Animal Services at 805-934-6119.</p> <p>For animals less than 5 pounds (i.e., bats), submit the animal in a collection container (i.e., sterile urine cup). For animals greater than 5 pounds, remove the animal's head (completed by Santa Maria Animal Services) and transport at refrigerated temperatures in a specimen transport bag. Do not transport specimens for testing in red bags used for biohazardous waste.</p>
<b>Transportation Information</b>	Specimens not delivered to the laboratory on the day of collection/decapitation should be refrigerated at 2 °– 8° C.
<b>Specimen Stability</b>	Varies. Transport to the laboratory as soon as possible to avoid further tissue decomposition.
<b>Unacceptable Conditions</b>	Putrefied organisms that have significant destruction to or absence of the key identifying anatomical structures needed for confirmation (e.g., brain stem, cerebellum, and hippocampus), samples that are received unlabeled/mislabeled and/or without the appropriate Santa Barbara County Public Health Laboratory requisition. <b>Live animals (i.e., bats) will not be accepted.</b>
<b>CPT Codes</b>	N/A
<b>Laboratory Forms</b>	<a href="#">Santa Barbara Public Health Laboratory Requisition</a>

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## Test Order

Rapid Plasma Reagin (Quantitative and Qualitative)

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<b>Performing Laboratory</b>	Santa Barbara County Public Health Laboratory
<b>Specimen Type</b>	Serum
<b>Specimen Container</b>	Gold top or red top
<b>Minimum Volume</b>	0.5 ml
<b>Specimen Handling (Collection Information)</b>	<b>When this test is ordered, reflex tests may be performed.</b> If the initial RPR is reactive, an RPR titer will be performed. Quantifiable samples will be confirmed via Treponema Pallidum Particle Agglutination Assay (TP-PA). In the event of an inconclusive TP-PA, the sample will be analyzed via Fluorescent Treponemal Antibody Absorption (FTA-ABS). Collect sample using approved venipuncture procedures. Allow the sample to clot for thirty minutes in the vertical position. Centrifuge the sample for 10 minutes at 2000-2500 revolutions per minute (rpm). Decant the sample into a sterile aliquot tube appropriate for the anticipated method of transportation. Deliver to the laboratory at refrigerated temperatures. When centrifugation is not possible, obtain the sample following the above procedures and transport to the laboratory at temperatures between 2-8°C.
<b>Transportation Information</b>	Transport at 2° - 8° C.
<b>Specimen Stability</b>	Up to 14 days refrigerated and/or frozen. Refrigerated samples are preferred over frozen specimens.
<b>Unacceptable Conditions</b>	Samples collected with preservatives (i.e., anticoagulants) and those that exceed the 14 day stability window, grossly hemolytic and/or lipolytic samples, samples that are received unlabeled/mislabeled and/or without the appropriate Santa Barbara Public Health Laboratory requisition.
<b>CPT Codes</b>	86592, 86593, 86781
<b>Laboratory Forms</b>	<a href="#">Santa Barbara Public Health Laboratory Requisition</a>

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## Test Order

Syphilis Qualitative Test: Venereal disease research laboratory (VDRL)

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<b>Performing Laboratory</b>	Santa Barbara County Public Health Laboratory
<b>Specimen Type</b>	Cerebrospinal fluid (CSF)
<b>Specimen Container</b>	Sterile tube
<b>Minimum Volume</b>	0.5 mL
<b>Specimen Handling (Collection Information)</b>	<p><b>When this test is ordered, reflex tests may be performed.</b> If the initial VDRL qualitative test is reactive, a VDRL titer will be performed at an additional charge.</p> <p>Perform a lumbar puncture collecting samples into pre-labeled CSF tubes (e.g., tubes one through four). Aliquot 1-2 ml into sterile collection container or send the contents of tube three to the Public Health Laboratory.</p>
<b>Transportation Information</b>	Specimens not delivered to the laboratory on the day of collection should be refrigerated at 2 °– 8° C.
<b>Specimen Stability</b>	Up to 14 days refrigerated and/or frozen. Refrigerated samples are preferred over frozen specimens.
<b>Unacceptable Conditions</b>	Specimens containing excess blood and/or those that have been contaminated and/or diluted, and samples that are received unlabeled/mislabeled and/or without the appropriate Santa Barbara Public Health Laboratory requisition.
<b>CPT Codes</b>	86592, 86593
<b>Laboratory Forms</b>	<a href="#">Santa Barbara Public Health Laboratory Requisition</a>

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