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<b>Bordetella species Culture</b>		
<p><b>Isolation and identification of <i>Bordetella</i> species including <i>Bordetella pertussis</i> and <i>Bordetella parapertussis</i>.</b></p>	<p><i>Test Type:</i> Culture</p> <p><i>Reference Range:</i> No <i>B. pertussis</i> recovered, No <i>B. parapertussis</i> recovered</p> <p><i>Specimen Requirements:</i> Nasopharyngeal swab: Place swab into Regan Lowe transport tube (VDHL Kit #5). Ensure swab is <u>completely</u> submerged.</p> <p><i>Transport Temperature:</i> 2-8°C must be received within 4 days of collection.</p> <p><i>Set up:</i> Monday-Saturday</p> <p><i>Results Available:</i> 7 days</p> <p><i>CPT Code:</i> 87070/87077</p>	
<b>Bordetella species PCR</b>		
<p><b><i>Bordetella</i> DNA qualitative real-time PCR.</b></p> <ul style="list-style-type: none"> <li>• This test detects <i>Bordetella pertussis</i>, <i>Bordetella parapertussis</i>, and <i>Bordetella holmseii</i>.</li> </ul> <p>The performance characteristics of the polymerase chain reaction (PCR) test for <i>Bordetella</i> was validated by the Vermont Department of Health Laboratory. The U.S. Food and Drug Administration (FDA) has not approved or cleared this test. The results are not intended to be used as the sole means for clinical diagnosis or patient management decisions.</p>	<p><i>Test Type:</i> PCR</p> <p><i>Reference Range:</i> No <i>B. pertussis</i>, <i>B. parapertussis</i>, or <i>B. holmseii</i> DNA detected</p> <p><i>Specimen Requirements:</i> <b>Dacron or Copan Flocked</b> nasopharyngeal swab: Place swab into Regan Lowe transport tube (VDHL Kit #5). Ensure swab is <u>completely</u> submerged.</p> <p><i>Transport Temperature:</i> 2-8°C must be received within 4 days of collection</p> <p><i>Set up:</i> Mondays and Thursdays, or as needed.</p> <p><i>Results Available:</i> Within 1 working day</p> <p><i>CPT Code:</i> 87798</p>	

<b>Brucella Total Antibody</b>		
<p>Brucella titers of 1:80 to 1:160 are strongly suggestive of Brucellosis. However, a progressive increase in titer between acute and convalescent specimens is the prime evidence of recent infection. Confirmation of serodiagnosis requires demonstration of a fourfold titer difference between acute and convalescent specimens taken at appropriate times.</p> <p>Cross-reactions may occur between <i>Brucella abortus</i> and <i>Francisella tularensis</i> antigens and antisera. Therefore, both assays will be run on each specimen.</p>	<p><i>Test Type:</i> Agglutination</p> <p><i>Reference Range:</i> <math>\leq 1:20</math></p> <p><i>Specimen Requirements:</i> 1.0mL serum (VDHL Kit #13/14)</p> <p><i>Transport Temperature:</i> -20°C (dry ice)</p> <p><i>Set up:</i> Monday-Wednesday as needed</p> <p><i>Results Available:</i> Within 3 working days</p> <p><i>CPT Code:</i> 86622</p>	

<b>Campylobacter jejuni</b>		
<p><b>Isolation and/or identification of <i>Campylobacter</i> spp.</b></p> <p>This test may be ordered individually or as part of the <b>Enteric Screen</b>, which includes the enteric pathogens <i>Campylobacter</i>, <i>Salmonella</i>, <i>Shigella</i>, <i>Yersinia enterocolitica</i>, <i>E. coli</i> O157:H7, and non-O157:H7 Shiga-toxin producing <i>E. coli</i>.</p>	<p><i>Test Type:</i> Culture</p> <p><i>Reference Range:</i> No <i>C. jejuni</i> recovered</p> <p><i>Specimen Requirements:</i> <b>Stool</b> preserved in Cary-Blair based transport media (VDHL Kit #1)</p> <p><b>Isolate</b> preserved in Cary-Blair (VDHL Kit#1)</p> <p><i>Transport Temperature:</i> Room temperature, must be received within 3 days from date of collection</p> <p><i>Set up:</i> Monday-Saturday</p> <p><i>Results Available:</i> Stool: 3 days from date of receipt Isolate: 1-2 days from date of receipt</p> <p><i>CPT Code:</i> 87046/87077</p>	

<b><i>Chlamydia trachomatis</i> and <i>Neisseria gonorrhoeae</i></b>		
<p>Single specimens are tested for both organisms.</p> <p>This assay should <b>not</b> be used for test-of-cure specimens. See <i>Neisseria gonorrhoeae</i> Culture for test of cure specimens. Culture for <i>Chlamydia trachomatis</i> is not available at the VDHL.</p>	<p><i>Test Type:</i></p> <p><i>Reference Range:</i></p> <p><i>Specimen Requirements:</i></p> <p><i>Transport Temperature:</i></p> <p><i>Set up:</i></p> <p><i>Results Available:</i></p> <p><i>CPT Code:</i></p>	<p>Nucleic Acid Amplified Test</p> <p>Negative for <i>C. trachomatis</i> Negative for <i>N. gonorrhoeae</i></p> <p>Gen-Probe Aptima Combo 2 assay collection kit (urine or swab) (VDHL Kit #7)</p> <p>2-25°C within 60 days of collection for swabs; 30 days for urine specimens</p> <p>Monday and Thursday</p> <p>Within 2-4 working days</p> <p>87801</p>

<b><i>Cryptosporidium parvuum</i></b>		
<p>Enzyme immunoassay for <i>Cryptosporidium parvuum</i>.</p> <p>This assay should <b>not</b> be used for test-of-cure specimens.</p>	<p><i>Test Type:</i></p> <p><i>Reference Range:</i></p> <p><i>Specimen Requirements:</i></p> <p><i>Transport Temperature:</i></p> <p><i>Set up:</i></p> <p><i>Results Available:</i></p> <p><i>CPT Code:</i></p>	<p>EIA</p> <p>Negative</p> <p>Stool in Total-Fix (VDHL Kit #2), SAF, Cary-Blair liquid based transport media (VDHL Kit #1), or 10% buffered formalin. Specimen is acceptable for up to two months in Total-Fix, SAF, and 10% formalin. Specimen is acceptable for 4 days in Cary-Blair based media.</p> <p>Room temperature</p> <p>Monday, Wednesday, Friday</p> <p>Within 1 working day</p> <p>87328</p>

***Cyclospora* spp.**

<b>Identification of <i>Cyclospora</i> spp. in stool.</b>	<i>Test Type:</i>  <i>Reference Range:</i>  <i>Specimen Requirements:</i>  <i>Transport Temperature:</i>  <i>Set up:</i>  <i>Results Available:</i>  <i>CPT Code:</i>	Acid-fast stain  No <i>Cyclospora</i> seen  Stool in Total-Fix (VDHL Kit #2), SAF, or 10% buffered formalin. Specimen is acceptable for up to two months in these preservatives  Room temperature  As needed  Within 1 working day  88312
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***E. coli* O157:H7**

<b>Isolation and Identification of <i>E. coli</i> O157:H7</b>  <b>This test may be ordered individually or as part of the <u>Enteric Screen</u>, which includes the enteric pathogens <i>Campylobacter</i>, <i>Salmonella</i>, <i>Shigella</i>, <i>Yersinia enterocolitica</i>, <i>E. coli</i> O157:H7, and non-O157:H7 Shiga-toxin producing <i>E. coli</i>.</b>	<i>Test Type:</i>  <i>Reference Range:</i>  <i>Specimen Requirements:</i>    <i>Transport Temperature:</i>    <i>Set up:</i>  <i>Results Available:</i>    <i>CPT Code:</i>	Culture  No <i>E. coli</i> O157:H7 isolated  <b>Stool</b> preserved in Cary-Blair based transport media (VDHL Kit #1)  <b>Isolate</b> on agar slant (VDHL Kit#4)  Room temperature, must be received within 3 days from date of collection  Monday – Friday  <b>Stool:</b> 3 days from date of receipt <b>Isolate:</b> 2 days from date of receipt  87046/87077
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<b><i>E. coli</i> Shiga-like Toxin</b>		
<p>For the detection of Shiga-like Toxins I and II (Verotoxins) in stool specimens.</p> <p>This test may be ordered individually or as part of the <b>Enteric Screen</b>, which includes the enteric pathogens <i>Campylobacter</i>, <i>Salmonella</i>, <i>Shigella</i>, <i>Yersinia enterocolitica</i>, <i>E. coli</i> O157:H7, and non-O157:H7 Shiga-toxin producing <i>E. coli</i>.</p>	<p><i>Test Type:</i> EIA</p> <p><i>Reference Range:</i> Negative</p> <p><i>Specimen Requirements:</i> <b>Stool</b> preserved in Cary-Blair based transport media (VDHL Kit #1)</p> <p><b>MacConkey Broth</b> inoculated with 200µL of stool and incubated at 37°C for 24 hours.</p> <p><i>Transport Temperature:</i> Room temperature: must be received within 3 days from the date of collection</p> <p><i>Set up:</i> Monday, Wednesday, Friday</p> <p><i>Results Available:</i> Within 1 working day</p> <p><i>CPT Code:</i> 87427</p>	

<b>Enteric Screen</b>		
<p>Culture for <i>Salmonella</i>, <i>Shigella</i>, <i>Campylobacter</i>, <i>Yersinia enterocolitica</i>, <i>E. coli</i> O157:H7, and non- O157:H7 Shiga-toxin producing <i>E. coli</i>.</p>	<p><i>Test Type:</i> Culture</p> <p><i>Reference Range:</i> No pathogens isolated</p> <p><i>Specimen Requirements:</i> Stool preserved in Cary-Blair based transport media (VDHL Kit #1)</p> <p><i>Transport Temperature:</i> Room temperature: must be received within 3 days from date of collection</p> <p><i>Set up:</i> Monday – Saturday</p> <p><i>Results Available:</i> 3 days from date of receipt</p> <p><i>CPT Code:</i> 87046/87077</p>	

<b>Giardia</b>		
Enzyme immunoassay for <i>Giardia intestinalis</i> (syn. <i>lambia</i> ).  <b>This assay should <u>not</u> be used for test-of-cure specimens.</b>	<i>Test Type:</i>  <i>Reference Range:</i>  <i>Specimen Requirements:</i>  <i>Transport Temperature:</i>  <i>Set up:</i>  <i>Results Available:</i>  <i>CPT Code:</i>	EIA  Negative  Stool in Total-Fix (VDHL Kit #2), SAF, Cary-Blair liquid based transport media (VDHL Kit #1), or 10% buffered formalin. Specimen is acceptable for up to two months in Total-Fix, SAF, and 10% formalin. Specimen is acceptable for 4 days in Cary-Blair based media.  Room Temperature  Monday, Wednesday, Friday  Within 1 working day  87329

<b>Gonorrhea Culture</b>		
Culture and identification of <i>Neisseria gonorrhoeae</i> , used for test-of-cure patients or in case of suspect sexual assault.	<i>Test Type:</i>  <i>Reference Range:</i>  <i>Specimen Requirements:</i>  <i>Transport Temperature:</i>  <i>Set up:</i>  <i>Results Available:</i>  <i>CPT Code:</i>	Culture  No <i>N. gonorrhoeae</i> recovered  Inoculated Jembec plate (VDHL Kit #8).  Incubate plates 16-18 hours at 37°C prior to sending or deliver to laboratory w/n 1 hour of collection. Do not refrigerate.  As needed  3 days from date of receipt  87077

<b>Haemophilis influenzae</b>		
Culture and identification of <i>Haemophilis influenzae</i>	<i>Test Type:</i>  <i>Reference Range:</i>  <i>Specimen Requirements:</i>  <i>Transport Temperature:</i>  <i>Set up:</i>  <i>Results Available:</i>  <i>CPT Code:</i>	Culture  No <i>H. influenzae</i> identified  Pure isolate  Room temperature  As needed  1 working day  87040/87077/87147



<b>Hepatitis B Panel</b>	
<p><b>Includes:</b></p> <ul style="list-style-type: none"> <li>• Hepatitis B surface Antigen</li> <li>• Hepatitis B core Total Antibody</li> <li>• Hepatitis B surface Antibody</li> </ul> <p>When determining disease state, no single result should be used alone but in conjunction with the other Hepatitis B serological markers.</p>	<p><i>Test Type:</i> EIA</p> <p><i>Reference Range:</i> Non-reactive</p> <p><i>Specimen Requirements:</i> 1.5mL serum (VDHL Kit#13/14)</p> <p><i>Transport Temperature:</i> 2-8°C. Serum must be received within 48 hours of collection.</p> <p><i>Set up:</i> Monday and Thursday</p> <p><i>Results Available:</i> 1-4 working days</p> <p><i>CPT Code:</i> 87340/86706/86704</p>

<b>Hepatitis B Core Total Antibody (IgG and IgM) (Total Anti-HBc)</b>	
<p>Specimens reactive for Hepatitis B Core Total Antibody are also tested for Hepatitis B Core IgM.</p> <p>When determining disease state, no single result should be used alone but in conjunction with other Hepatitis B serological markers.</p>	<p><i>Test Type:</i> EIA</p> <p><i>Reference Range:</i> Non-reactive</p> <p><i>Specimen Requirements:</i> 1.0mL serum (VDHL Kit #13/14)</p> <p><i>Transport Temperature:</i> 2-8°C. Serum must be received within 48 hours of collection.</p> <p><i>Set up:</i> Monday and Thursday</p> <p><i>Results Available:</i> 1-4 working days</p> <p><i>CPT Code:</i> 86704</p>

<b>Hepatitis B Core IgM (IgM Anti-HBc)</b>	
<p><b>*Only performed on specimens reactive for Hepatitis B Core Total antibody.</b></p> <p>When determining disease state, no single result should be used alone but in conjunction with other Hepatitis B serological markers.</p>	<p><i>Test Type:</i> EIA</p> <p><i>Reference Range:</i> Non-reactive</p> <p><i>Specimen Requirements:</i> 1.0mL serum (VDHL Kit #13/14)</p> <p><i>Transport Temperature:</i> 2-8°C. Serum must be received within 48 hours of collection.</p> <p><i>Set up:</i> As needed</p> <p><i>Results Available:</i> 1-4 working days</p> <p><i>CPT Code:</i> 86705</p>

<b>Hepatitis B Surface Antibody (Anti-HBs)</b>		
<p>When determining disease state, no single result should be used alone but in conjunction with other Hepatitis B serological markers.</p>	<i>Test Type:</i>	EIA
	<i>Reference Range:</i>	Non-reactive
	<i>Specimen Requirements:</i>	1.0mL serum (VDHL Kit #13/14)
	<i>Transport Temperature:</i>	2-8°C. Serum shipped at ambient temperature received within 48 hours of collection.
	<i>Set up:</i>	Monday and Thursday
	<i>Results Available:</i>	1-4 working days
	<i>CPT Code:</i>	86706

<b>Hepatitis B Surface Antibody Quantitation for Immune Response</b>		
<p>A reactive result indicates a Hepatitis B Surface Antibody level greater than 10 mLU/mL. This level is generally considered to indicate protective immunity.</p>	<i>Test Type:</i>	EIA
	<i>Reference Range:</i>	Non-reactive
	<i>Specimen Requirements:</i>	1.0mL serum (VDHL Kit #13/14)
	<i>Transport Temperature:</i>	2-8°C. Serum must be received within 48 hours of collection.
	<i>Set up:</i>	Monday and Thursday
	<i>Results Available:</i>	Within 1-4 working days
	<i>CPT Code:</i>	86706

<b>Hepatitis B Surface Antigen</b>		
<p>Repeatedly Reactive HBsAg results are confirmed by neutralization.</p> <p>When determining disease state, no single result should be used alone but in conjunction with other Hepatitis B serological markers.</p>	<i>Test Type:</i>	EIA
	<i>Reference Range:</i>	Non-reactive
	<i>Specimen Requirements:</i>	1.0mL serum (VDHL Kit #13/14)
	<i>Transport Temperature:</i>	2-8°C. Serum must be received within 48 hours of collection.
	<i>Set up:</i>	Monday and Thursday
	<i>Results Available:</i>	Within 1-4 working days
	<i>CPT Code:</i>	87340/87341

<b>Hepatitis C Antibody (Screen)</b>		
<p>Samples with high s/co ratios usually (95%) confirm positive, but &lt; 5 of every 100 might represent false-positives; more specific testing can be requested, if indicated.</p>	<p><i>Test Type:</i> EIA</p> <p><i>Reference Range:</i> Non-reactive</p> <p><i>Specimen Requirements:</i> 1.0mL serum (VDHL Kit #13/14)</p> <p><i>Transport Temperature:</i> Whole blood shipped at up to 25°C within 24 hours. Serum shipped up to 37°C and received within 7 days of collection</p> <p><i>Set up:</i> Tuesday and Thursday</p> <p><i>Results Available:</i> Within 1-3 working days</p> <p><i>CPT Code:</i> 86803</p>	
<b>HIV-1 Oral Fluid</b>		
<p>Confirmatory HIV-1 Oral Fluid western blot testing will be performed on HIV-1 Oral Fluid EIA repeatedly reactive specimens.</p>	<p><i>Test Type:</i> EIA</p> <p><i>Reference Range:</i> Non-reactive</p> <p><i>Specimen Requirements:</i> Oral mucosal exudates collected with the OraSure collection kit.</p> <p><i>Transport Temperature:</i> 2-37°C and received within 19 days of collection.</p> <p><i>Set up:</i> Monday, Wednesday, Friday</p> <p><i>Results Available:</i> Within 1-3 working days for those specimens not needing repeat testing.</p> <p><i>CPT Code:</i> 86701</p>	
<b>HIV-1 Oral Fluid Western Blot</b>		
<p>Confirmation test for HIV-1.</p> <p>Performed on all HIV-1 Oral Fluid repeatedly reactive results.</p> <p>For HIV-1 western blot test only requests: Please include screen test results on the requisition form.</p>	<p><i>Test Type:</i> Western Blot</p> <p><i>Reference Range:</i> Negative</p> <p><i>Specimen Requirements:</i> Oral mucosal exudates collected with the OraSure collection kit.</p> <p><i>Transport Temperature:</i> 2-37°C and received within 19 days of collection.</p> <p><i>Set up:</i> As needed</p> <p><i>Results Available:</i> Within 2 working days.</p> <p><i>CPT Code:</i> 86689</p>	

<b>HIV-1/HIV-2 (Screen)</b>		
<b>Qualitative detection of acute and primary infection for HIV-1/HIV-2 Ab and HIV-1 p24 Ag.</b>	<i>Test Type:</i> <i>Reference Range:</i> <i>Specimen Requirements:</i> <i>Transport Temperature:</i>  <i>Set up:</i>  <i>Results Available:</i>  <i>CPT Code:</i>	Combo Ag/Ab EIA Non-reactive 1.0mL serum (VDHL Kit #13/14) Serum may be stored for ≤ 2 days at room temperature or for 7 days at 2-8°C including the time those samples are in transit. Monday, Wednesday, Friday Within 3 working days 87389

<b>HIV-1/HIV-2 Ab Differentiation Immunoassay</b>		
<b>HIV-1/HIV-2 Ab Differentiation Immunoassay will be performed on all HIV-1/HIV-2 EIA repeatedly reactive specimens.</b>	<i>Test Type:</i> <i>Reference Range:</i> <i>Specimen Requirements:</i> <i>Transport Temperature:</i>  <i>Set up:</i>  <i>Results Available:</i>  <i>CPT Code:</i>	Immunoassay Rapid Quantitative Negative 1.0mL serum (VDHL Kit #13/14) Serum shipped at ambient temperature within 2 days of collection or shipped 2-8°C within 5 days of collection. As needed Within 3 working days 86689

<b>Interferon Gamma Release Assay (IGRA) / Cellestis QuantiFeron®-TB Gold In-Tube test - <i>M. tuberculosis</i></b>		
<p>The Cellestis QuantiFeron®-TB Gold In-Tube test (QFT-GIT) is a qualitative laboratory test using whole blood specimens. The QFT-GIT test can be used to assess for the presence of latent tuberculosis infection (LTBI) or to aid in the diagnosis of active tuberculosis (TB). The QFT-GIT test cannot distinguish between LTBI and active TB, so the test should be used in conjunction with risk assessment, radiography, and other medical and diagnostic evaluations. The QFT-GIT should not be used exclusively in diagnosing tuberculosis or for patients currently receiving treatment for active or LTBI.</p> <p>QFT-GIT testing can be performed by the VDHL if the following applies:</p> <ul style="list-style-type: none"> <li>• Persons who have received the BCG vaccine and have had contact with persons known to have active TB or are suspected to have active TB.</li> <li>• Close contacts of persons known or suspected to have active TB.</li> <li>• Foreign-born persons from areas that have a high incidence of active TB.</li> <li>• People who have had frequent or prolonged visits to areas with a high prevalence of active TB</li> <li>• Persons considered at risk for TB/LTBI and may not return to have the TST read.</li> <li>• Persons who have received BCG (either as a vaccine or for cancer therapy). The VDHL does not require documented BCG as a vaccine. If an individual is from a country where a patient is suspected to have received the vaccine, QFT-GIT will be considered the preferred test.</li> <li>• Persons from groups that historically have poor rates of return for TST reading.</li> </ul>	<p><i>Test Type:</i> Enzyme-Linked Immunosorbent Assay (ELISA)</p> <p><i>Reference Range:</i> Negative</p> <p><i>Specimen Requirements:</i> 0.8-1.2mL blood in QuantiFERON-QTB Gold In-Tube Collection Kit (VDHL Kit #10)</p> <p><i>Set up:</i> As needed</p> <p><i>Transport Temperature:</i> Incubated specimens: ship at 4-27°C. Must be received within 3 days from date of collection. Non-incubated specimens: ship at 17-27°C. Must be received within 16 hours from time of collection.</p> <p><i>Results Available:</i> Within 1 working day</p> <p><i>CPT Code:</i> 86480</p>	

<b>Influenza A/B PCR (For Surveillance Purposes Only)</b>	
<ul style="list-style-type: none"> <li>● <b>Detection of Influenza A or Influenza B.</b></li> <li>● <b>Subtyping will be performed on all positive Influenza A specimens. The following subtypes can be detected:</b> <ul style="list-style-type: none"> <li>- H1N1 (Seasonal)</li> <li>- H3N2 (Seasonal)</li> <li>- 2009 H1N1</li> <li>- H3N2 variant (Swine-origin triple reassortant virus)</li> </ul> </li> <li>● <b>Specimens accepted from Sentinel Providers, Early Aberration Reporting System (EARS) Providers, Long Term Care Facilities or other Institutions.</b></li> <li>● <b>Suspect cases of Pandemic or Avian Influenza will be accepted for PCR testing with prior approval from Epidemiology (1-800-640-4374 or 802-863-7240).</b></li> <li>● <b>Specimens also accepted from providers with special circumstances (e.g. a patient with a serious illness or complication that might be due to influenza or a patient who is hospitalized with an influenza-like illness).</b></li> </ul> <p><b>Specimens will NOT be tested without the following information:</b></p> <ul style="list-style-type: none"> <li>● <b>Travel history</b></li> <li>● <b>Date of collection</b></li> <li>● <b>Date of onset</b></li> <li>● <b>Vaccination history</b></li> <li>● <b>Swabs with calcium alginate or cotton tips and wooden shafts</b></li> </ul>	<p><i>Test Type:</i> RT-PCR</p> <p><i>Reference Range:</i> Influenza A virus RNA not detected, Influenza B virus RNA not detected</p> <p><i>Specimen Requirements:</i> Nasopharyngeal swabs (preferred), nasal swabs, throat swabs, dual nasopharyngeal/throat swabs Additional sites include Nasal aspirates, Nasal washes, Bronchoalveolar lavage, Bronchial wash, Tracheal aspirate, Sputum (VDHL Kit #9).</p> <p><i>Transport Temperature:</i> 2-8 °C to arrive within 3 days of collection or freeze specimen at -70°C and ship on dry ice. <b>Time in transit should not exceed 24 hours.</b></p> <p><i>Set up:</i> Tuesday and Friday or as needed</p> <p><i>Results</i> 1-4 working days</p> <p><i>Available: CPT Code:</i> 87798</p>

<b>Lead, Adult Blood (Diagnostic)</b>		
	<i>Test Type:</i>	Graphite Furnace Atomic Absorption
	<i>Reference Range:</i>	<40.0µg/dL
	<i>Specimen Requirements:</i>	100.0µL minimum whole blood; EDTA anticoagulant
	<i>Transport Temperature:</i>	Refrigerate when not in transit (Recommended)
	<i>Set up:</i>	Monday – Thursday
	<i>Results Available:</i>	Within 7 working days
	<i>CPT Code:</i>	83655

<b>Lead, Childhood Blood (Diagnostic)</b>		
	<i>Test Type:</i>	Graphite Furnace Atomic Absorption
	<i>Reference Range:</i>	<10.0µg/dL
	<i>Specimen Requirements:</i>	100.0µL minimum whole blood; EDTA anticoagulant
	<i>Set up:</i>	Monday – Thursday
	<i>Transport Temperature:</i>	Refrigerate when not in transit (Recommended)
	<i>Results Available:</i>	Within 7 working days
	<i>CPT Code:</i>	83655

<b>Legionella Culture</b>		
<b>Isolation and identification of <i>Legionella pneumophila</i></b>	<i>Test Type:</i>	Culture
	<i>Reference Range:</i>	No <i>L. pneumophila</i> recovered
	<i>Specimen Requirements:</i>	Sputum, pleural fluid, transtracheal aspirates, bronchial washings. (VDHL Kit #6)
	<i>Transport Temperature:</i>	2-8°C within 3 days of collection. If more than 3 days, ship frozen on dry ice.
	<i>Results Available:</i>	7 days
	<i>CPT Code:</i>	87070/87077

<b>Legionella IgG Antibody</b>		
<p><i>Legionella pneumophila</i> serogroups 1-6</p> <ul style="list-style-type: none"> <li>• A positive is presumptive supporting evidence of exposure</li> <li>• Solid evidence for a diagnosis of legionellosis is obtained when sero-conversion occurs with paired sera</li> <li>• Performed by a Reference Laboratory</li> </ul>	<p><i>Test Type:</i> ELISA</p> <p><i>Reference Range:</i> Negative</p> <p><i>Specimen Requirements:</i> 0.5mL serum (VDHL Kit #13/14)</p> <p><i>Transport Temperature:</i> 2-25°C. Serum received within 48 hours of collection.</p> <p><i>Set up:</i> As Needed</p> <p><i>Results Available:</i> Within 5-7 working day</p> <p><i>CPT Code:</i> 86713</p>	
<b>Legionella Urine Antigen</b>		
<p><i>Legionella pneumophila</i> serogroup 1</p> <p>Results are reported as <u>presumptive only</u>.</p>	<p><i>Test Type:</i> Immunochromatographic membrane assay</p> <p><i>Reference Range:</i> Presumptive Negative</p> <p><i>Specimen Requirements:</i> Urine collected in standard containers.</p> <p><i>Transport Temperature:</i> 15-30°C if received within 24 hours of collection or 2-8°C if received within 14 days of collection.</p> <p><i>Set up:</i> As needed</p> <p><i>Results Available:</i> 1 working day</p> <p><i>CPT Code:</i> 87450</p>	
<b>Listeria spp.</b>		
<p>Culture and identification of <i>Listeria</i> spp.</p>	<p><i>Test Type:</i> Culture</p> <p><i>Reference Range:</i> No <i>Listeria</i> identified</p> <p><i>Specimen Requirements:</i> Pure isolate</p> <p><i>Transport Temperature:</i> Room temperature</p> <p><i>Set up:</i> As needed</p> <p><i>Results Available:</i> 3 days from date of receipt</p> <p><i>CPT Code:</i> 87040/87070/87077</p>	



<b>Measles (Rubeola) IgG Antibody (Diagnostic)</b>		
<p><b>*Specimen: 1.0mL of acute (at onset of symptoms) and convalescent (2 weeks later) serum. A four-fold or greater rise in antibody titer or seroconversion is indicative of a primary or recent measles (Rubeola) infection.</b></p> <p><b>Report all suspect Measles cases to Epidemiology at 1-800-640-4374 or 863-7240 before submitting specimens.</b></p>	<p><i>Test Type:</i> EIA</p> <p><i>Reference Range:</i> Measles IgG antibody not detected</p> <p><i>Specimen Requirements:</i> 1.0mL Acute serum* 1.0mL Convalescent serum* (VDHL Kit #13/14)</p> <p><i>Transport Temperature:</i> 2-8°C. Specimen should be received at VDHL within 2 days.</p> <p><i>Set up:</i> As needed</p> <p><i>Results Available:</i> 1 working day</p> <p><i>CPT Code:</i> 86765</p>	
<b>Measles (Rubeola) IgG Antibody (Immune status)</b>		
<p><b>A reactive result indicates immunity to Rubeola infection.</b></p>	<p><i>Test Type:</i> EIA</p> <p><i>Reference Range:</i> Measles IgG antibody not detected</p> <p><i>Specimen Requirements:</i> 1.0mL (minimum 0.25mL) serum (VDHL Kit #13/14)</p> <p><i>Transport Temperature:</i> 2-8°C. Specimen should be received at VDHL within 2 days.</p> <p><i>Set up:</i> Tuesday and Friday</p> <p><i>Results Available:</i> Within 1-4 working days</p> <p><i>CPT Code:</i> 86765</p>	
<b>Measles (Rubeola) IgM Antibody (Diagnostic)</b>		
<p><b>Report all suspect Measles cases to Epidemiology at 1-800-640-4374 or 863-7240 before submitting specimen.</b></p> <p><b>*1.0mL serum drawn at least 3 days after rash</b></p>	<p><i>Test Type:</i> Capture EIA</p> <p><i>Reference Range:</i> Measles IgM antibody not detected</p> <p><i>Specimen Requirements:</i> 1.0mL serum* (VDHL Kit#13/14)</p> <p><i>Transport Temperature:</i> 2-8°C. Specimen should be received at VDHL within 2 days.</p> <p><i>Set up:</i> As needed</p> <p><i>Results Available:</i> 1 working day</p> <p><i>CPT Code:</i> 86765</p>	

**Measles (Rubeola) Real Time Reverse Transcriptase PCR (rRT-PCR)**

<p>Order this test if an active case of Measles is suspected.</p> <p><b>Report all suspect cases to Epidemiology at 1-800-640-4374 or 802-863-7240 prior to submitting specimen.</b></p> <p>The performance characteristics of the Centers for Disease Control and Prevention (CDC) rRT-PCR test for Measles were validated by the Vermont Department of Health Laboratory. The U.S. Food and Drug Administration (FDA) has not approved or cleared this test. The results are not intended to be used as the sole means for clinical diagnosis or patient management decisions.</p>	<p><i>Test Type:</i></p> <p><i>Reference Range:</i></p> <p><i>Specimen Requirements:</i></p> <p><i>Transport Temperature:</i></p> <p><i>Set up:</i></p> <p><i>Results Available:</i></p> <p><i>CPT Code:</i></p>	<p>Real Time RT-PCR</p> <p>Measles RNA not detected</p> <p><b>Synthetic oropharyngeal, nasal or nasopharyngeal swab:</b> place swab into viral transport medium (Kit # 11). Ensure swab is <u>completely</u> submerged.</p> <p><b>Urine:</b> &gt;50.0mL in a sterile, leak-proof container (requires prior approval).</p> <p>4°C. and must be received within 24 hours or frozen at -70°C or colder.</p> <p>Day of receipt or next working day if received after 12:00pm.</p> <p>Same day or next working day if received after 12:00pm.</p> <p>87798</p>
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**Mumps IgG antibody (Immune status)**

<p><b>A reactive result indicates immunity to Mumps infection.</b></p>	<p><i>Test Type:</i> EIA</p> <p><i>Reference Range:</i> Mumps antibody not detected</p> <p><i>Specimen Requirements:</i> 1.0mL (minimum 0.25mL) serum (VDHL Kit #13/14)</p> <p><i>Transport Temperature:</i> 2-8°C. Serum should be received at VDHL within 48 hours of collection.</p> <p><i>Set up:</i> Tuesday and Friday</p> <p><i>Results Available:</i> Within 1-4 working days</p> <p><i>CPT Code:</i> 86735</p>	
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**Mumps Real Time Reverse Transcriptase PCR (rRT-PCR)**

<p>Order this test if an active case of Mumps is suspected.</p> <p><b>Report all suspect cases to Epidemiology at 1-800-640-4374 or 802-863-7240 prior to submitting specimen.</b></p> <p>The performance characteristics of the Centers for Disease Control and Prevention (CDC) rRT-PCR test for Mumps were validated by the Vermont Department of Health Laboratory. The U.S. Food and Drug Administration (FDA) has not approved or cleared this test. The results are not intended to be used as the sole means for clinical diagnosis or patient management decisions.</p>	<p><i>Test Type:</i> Real Time RT-PCR</p> <p><i>Reference Range:</i> Mumps N Gene RNA not detected</p> <p><i>Specimen Requirements:</i> Buccal swab or oropharyngeal swab (Kit # 11)</p> <p><i>Transport Temperature:</i> 4°C. and must be received within 24 hours or frozen at -70°C or colder</p> <p><i>Set up:</i> Day of receipt or next working day if received after 12:00pm.</p> <p><i>Results Available:</i> Same day or next working day if received after 12:00pm.</p> <p><i>CPT Code:</i> 87798</p>	
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**Mycology**

- Mycology specimens are accepted only as specimens submitted for mycobacterial analysis.
- Filamentous fungi are referred to a reference laboratory for identification.

*Test Type:* Culture

*Reference Range:* No yeast recovered

*Specimen Requirements:* **Sputum:** > 3.0mL (VDHL Kit #6)

**CSF:** > 2.0mL

**Tissue:** Sterile container with a small amount of sterile saline

**Blood:** Collect 5mL or more in SPS tube. Do not use sodium heparin as an anti- coagulant

**Pleural fluid:** > 2.0mL

**Bronchial wash /lavage:** > 2.0mL

**Swab specimens will not be accepted**

*Transport Temperature:* 2-8°C for respiratory specimens, all others room temperature.

*Set up:* As needed

*Results Available:* 21-28 days

*CPT Code:* 87102

<b>Mycobacteria</b>	
<ul style="list-style-type: none"> <li>• Standard procedures are used for the staining and culture of all Mycobacteria.</li> <li>• Specimens are inoculated to both solid and liquid media using conventional and automated rapid broth system.</li> <li>• Acid fast bacilli growing in culture are identified by both DNA probe and biochemical identification methods.</li> <li>• AFB positive smear specimens are automatically tested by Nucleic Acid Amplification for <i>Mycobacterium tuberculosis complex</i>.</li> <li>• Specimens are set up Monday –Friday and smear results are faxed to the provider the same day as specimen receipt.</li> </ul>	<p><i>Test Type:</i> (see left)</p> <p><i>Reference Range:</i> <b>Smear:</b> No acid-fast bacilli seen <b>Culture:</b> No Mycobacteria recovered</p> <p><i>Specimen Requirements:</i> <b>Sputum:</b> &gt; 3.0mL, three consecutive specimens (VDHL Kit #6)</p> <p><b>CSF:</b> &gt; 2.0mL (VDHL Kit #6)</p> <p><b>Tissue/Lymph Node:</b> Sterile container with a small amount of sterile saline (VDHL Kit #6)</p> <p><b>Blood:</b> Collect in SPS or Heparin tube. <u>Do not use EDTA or ACD tube.</u></p> <p><b>Pleural and other body fluids:</b> &gt; 3.0mL (VDHL Kit #6)</p> <p><b>Bronchial wash /lavage:</b> &gt; 2.0mL (VDHL Kit #6)</p> <p><b>Urine:</b> &gt;40.0mL. First morning, clean catch. Catheter collections preferred. <u>Do not pool specimens or use midstream urine.</u> (VDHL Kit #6)</p> <p><b>Abscess:</b> Surface exudates in Luer tip syringe, tissue, aspirates.</p> <p><b>Swab specimens will not be accepted.</b></p> <p><i>Transport Temperature:</i> 2-8°C for respiratory specimens and urine. Room temperature for all others.</p> <p><i>Set up:</i> Monday – Friday</p> <p><i>Results Available:</i> Culture results : 6 weeks Smear results available same day of receipt (except weekends) Nucleic Acid Amp: 24 hours</p> <p><i>CPT Code:</i> Culture: 87118 Acid-Fast Smear: 87206 Nucleic acid Amp: 87556</p>

<b><i>Mycobacterium tuberculosis</i> Amplified Direct Test</b>		
<ul style="list-style-type: none"> <li>• <b>GEN-PROBE® AMPLIFIED™ Mycobacterium Tuberculosis Direct (MTD) Test detects M. tuberculosis complex rRNA in both smear positive and smear negative respiratory sediments prepared using NALC-NaOH decontamination. The MTD is intended for use only with specimens from patients showing signs and symptoms consistent with active pulmonary tuberculosis. Patients suspected of having pulmonary TB who have had less than 7 days of anti-tuberculosis therapy, or have not received such therapy in the last 12 months may be evaluated.</b></li> <li>• <b>Grossly bloody specimens are NOT recommended and may result in invalid results.</b></li> <li>• <b>This test is automatically performed on all respiratory specimens that are AFB smear positive.</b></li> <li>• <b>Performance of the MTD test with clinical specimens other than respiratory specimens has not been established by the manufacturer or the Vermont Department of Health Laboratory.</b></li> <li>• <b>Please contact the VDHL prior to sending the specimen.</b></li> </ul>	<p><i>Test Type:</i> Nucleic Acid Amplification Test</p> <p><i>Reference Range:</i> Negative for <i>M. tuberculosis</i> complex RNA</p> <p><i>Specimen Requirements:</i> <b>Sputum:</b> &gt; 3.0mL (VDHL Kit #6). <b>Bronchial wash /lavage:</b> &gt; 3.0mL (VDHL Kit #6). <b>Respiratory Sediments:</b> 1mL required. Must be received within 72 hours of digestion/decontamination. Store at 2-8°C until shipped.</p> <p><i>Transport Temperature:</i> Specimens must be sent at 2-8°C and received <b>within 72 hours</b> of collection.</p> <p><i>Set up:</i> As needed</p> <p><i>Results Available:</i> 24 hours</p> <p><i>CPT Code:</i> 87556</p>	

<b><i>M. tuberculosis</i> Antimicrobial Susceptibility AFB Primary Drug Panel</b>		
<p><i>M. tuberculosis</i> drug panel includes:</p> <ul style="list-style-type: none"> <li>- Ethambutol, Isoniazid, Rifampin by the VersaTrek Myco Susceptibility Kit. PZA testing performed by a reference laboratory.</li> </ul> <p>Specimens can be forwarded to the CDC for rapid confirmation of MDR-TB through the identification of genetic mutations associated with Rifampin and Isoniazid resistance. Mutations associated with resistance to the most effective second line drugs are also examined.</p>	<p><i>Test Type:</i> (see left)</p> <p><i>Reference Range:</i> By report</p> <p><i>Specimen Requirements:</i> Culture: safely contained on solid media.</p> <p><i>Transport Temperature:</i> Room temperature</p> <p><i>Set up:</i> As needed</p> <p><i>Results Available:</i> 14-21 days</p> <p><i>CPT Code:</i> 87184/87188</p>	

<b><i>Neisseria gonorrhoeae</i> and <i>Chlamydia trachomatis</i></b>		
<p>Single specimens are tested for both organisms.</p> <p>This assay should <u>not</u> be used for test-of-cure specimens. See <i>Neisseria gonorrhoeae</i> Culture for test of cure specimens. Culture for <i>Chlamydia trachomatis</i> is not available at the VDHL.</p>	<p><i>Test Type:</i></p> <p><i>Reference Range:</i></p> <p><i>Specimen Requirements:</i></p> <p><i>Transport Temperature:</i></p> <p><i>Set up:</i></p> <p><i>Results Available:</i></p> <p><i>CPT Code:</i></p>	<p>Nucleic Acid Amplified Test</p> <p>Negative for <i>C. trachomatis</i> Negative for <i>N. gonorrhoeae</i></p> <p>Gen-Probe Aptima Combo 2 assay collection kit (urine or swab) (VDHL Kit #7)</p> <p>2-25°C within 60 days of collection for swabs, 30 days for urine specimens</p> <p>Monday and Thursday</p> <p>Within 2-4 working days</p> <p>87801</p>

<b><i>Neisseria gonorrhoeae</i> Culture</b>		
<p>Culture and identification of <i>Neisseria gonorrhoeae</i>, used for test-of-cure patients or in case of suspect sexual assault.</p>	<p><i>Test Type:</i></p> <p><i>Reference Range:</i></p> <p><i>Specimen Requirements:</i></p> <p><i>Transport Temperature:</i></p> <p><i>Set up:</i></p> <p><i>Results Available:</i></p> <p><i>CPT Code:</i></p>	<p>Culture</p> <p>No <i>N. gonorrhoeae</i> recovered</p> <p>Inoculated Jembec plate (VDHL Kit #8).</p> <p>Incubate plates 16-18 hours at 37°C prior to sending or deliver to laboratory w/n 1 hour of collection. <u>Do not refrigerate.</u></p> <p>As needed</p> <p>3 days from date of receipt</p> <p>87077</p>

<b><i>Neisseria meningitidis</i></b>		
<p>Identification/confirmation and serotyping of <i>Neisseria meningitidis</i></p>	<p><i>Test Type:</i></p> <p><i>Reference Range:</i></p> <p><i>Specimen Requirements:</i></p> <p><i>Transport Temperature:</i></p> <p><i>Set up:</i></p> <p><i>Results Available:</i></p> <p><i>CPT Code:</i></p>	<p>Identification/confirmation and serotyping</p> <p>No <i>N. meningitidis</i> identified</p> <p>Pure isolate on Chocolate slant</p> <p>Room temperature</p> <p>As needed</p> <p>24 hours from date of receipt</p> <p>87040/87077</p>

<b>Norovirus</b>		
<p><b><u>For investigational use only.</u></b></p> <p>Please contact Epidemiology at 1-800-640-4374 or 802-863-7240 <u>before</u> submitting specimens.</p>	<p><i>Test Type:</i> PCR</p> <p><i>Reference Range:</i> No Norovirus nucleic acid detected</p> <p><i>Specimen Requirements:</i> Raw stool (VDHL Kit #23)</p> <p><i>Transport Temperature:</i> 2-8°C within 24 hours of collection</p> <p><i>Set up:</i> As needed</p> <p><i>Results Available:</i> 2 working days</p> <p><i>CPT Code:</i> 87798</p>	
<b>Ova &amp; Parasites (O&amp;P)</b>		
<p><b><i>Cryptosporidium</i> and <i>Cyclospora</i> are not detected with this method. Refer to <i>Cryptosporidium</i> and <i>Cyclospora</i> listed in this test catalog for the correct test method.</b></p>	<p><i>Test Type:</i> Microscopic examination</p> <p><i>Reference Range:</i> No parasites seen</p> <p><i>Specimen Requirements:</i> Stool in Total-Fix (VDHL Kit #2), SAF, or 10% buffered formalin. Specimen is acceptable for up to two months in these preservatives.</p> <p><i>Transport Temperature:</i> Room temperature</p> <p><i>Set up:</i> Monday – Friday</p> <p><i>Results Available:</i> Within 1 working day</p> <p><i>CPT Code:</i> 88313</p>	
<b>Parasite Examination</b>		
<p><b>Gross identification of parasites (e.g. worms) and suspect material passed in stool.</b></p>	<p><i>Test Type:</i> Varies</p> <p><i>Reference Range:</i> Descriptive report provided</p> <p><i>Specimen Requirements:</i> Submit specimen in Total-Fix preservative (VDHL Kit#2)</p> <p><i>Transport Temperature:</i> Room temperature</p> <p><i>Set up:</i> Monday-Friday</p> <p><i>Results Available:</i> 1-7 days</p> <p><i>CPT Code:</i> 87070/87077</p>	



<b>Pinworm</b>		
<b>Identification of <i>Enterobius vermicularis</i> (Pinworm).</b> <b>Collection of the specimen should occur first thing in the morning, prior to rising.</b>	<i>Test Type:</i>  <i>Reference Range:</i>  <i>Specimen Requirements:</i>  <i>Transport Temperature:</i>  <i>Set up:</i>  <i>Results Available:</i>  <i>CPT Code:</i>	Microscopic exam  No pinworm seen  Pinworm paddle (VDHL Kit #17).  Room temperature  As needed  Within 24 hours  87172

<b>Rubella IgG Antibody</b>		
<ul style="list-style-type: none"> <li>• <b>Patient Rubella IgG results equal to or greater than 10 IU/mL indicate past exposure to either rubella virus or vaccine, and probable protection from clinical infection.</b></li> <li>• <b>Antibody levels less than 10 IU/mL may be insufficient to provide protection from rubella virus infection.</b></li> <li>• <b>For diagnosis of current or recent rubella infection, obtain paired sera (acute and convalescent). The acute specimen should be collected as soon as possible after the onset of a rash or at the time of exposure. The convalescent specimen should be obtained from 10-21 days after the onset of a rash or at least 30 days after exposure in the absence of clinical symptoms associated with a rubella infection. A four-fold or greater rise in antibody titer or seroconversion is indicative of a primary or recent rubella infection.</b></li> <li>• <b>Seroconversion may also be seen after a vaccination procedure. Some persons previously exposed to rubella may demonstrate a rise in antibody titer. This is thought to represent re-infection and these patients rarely develop symptoms.</b></li> </ul>	<i>Test Type:</i>  <i>Reference Range:</i>  <i>Specimen Requirements:</i>  <i>Transport Temperature:</i>  <i>Set up:</i>  <i>Results Available:</i>  <i>CPT Code:</i>	Latex Agglutination  Rubella IgG antibodies <10 mIU/mL  0.5mL serum (VDHL Kit #13/14)  2-8°C. Specimen should be received at VDHL within 48 hours.  Monday, Wednesday, Friday  Within 1-3 working days  86762

<b>Rubella IgM Antibody</b>		
<p>Report all suspect cases to Epidemiology at 1-800-640-4374 or 863-7240 prior to submitting specimen.</p>	<p><i>Test Type:</i> EIA</p> <p><i>Reference Range:</i> Rubella IgM antibody not detected</p> <p><i>Specimen Requirements:</i> 1.0mL serum (VDHL Kit #13/14)</p> <p><i>Transport Temperature:</i> 2-8°C. Serum specimen should be received at VDHL within 48 hours.</p> <p><i>Set up:</i> As needed</p> <p><i>Results Available:</i> 1 day (verbal), 3 days(written)</p> <p><i>CPT Code:</i> 86762</p>	

<b>Salmonella spp.</b>		
<p>Isolation and identification of <i>Salmonella</i> spp.</p> <p>This test may be ordered individually or as part of the <b>Enteric Screen</b>, which includes the enteric pathogens <i>Campylobacter</i>, <i>Salmonella</i>, <i>Shigella</i>, <i>Yersinia enterocolitica</i>, <i>E. coli</i> O157:H7, and non-O157:H7 Shiga-toxin producing <i>E. coli</i>.</p>	<p><i>Test Type:</i> Culture</p> <p><i>Reference Range:</i> No <i>Salmonella</i> recovered</p> <p><i>Specimen Requirements:</i> <b>Stool</b> preserved in Cary-Blair based transport media (VDHL Kit#1)</p> <p><b>Isolate</b> on agar slant (VDHL Kit#4)</p> <p><i>Transport Temperature:</i> Room temperature must be received within 3 days from date of collection.</p> <p><i>Set up:</i> Monday-Saturday</p> <p><i>Results Available:</i> <b>Stool:</b> 3 days from date of receipt <b>Isolate:</b> 3-7 days from date of receipt</p> <p><i>CPT Code:</i> 87045/87077</p>	

<b>Shigella spp. (see also Enteric Screen)</b>		
<p><b>Isolation and identification of <i>Shigella</i> spp.</b></p> <p>This test may be ordered individually or as part of the <b>Enteric Screen</b>, which includes the enteric pathogens <i>Campylobacter</i>, <i>Salmonella</i>, <i>Shigella</i>, <i>Yersinia enterocolitica</i>, <i>E. coli</i> O157:H7, and non-O157:H7 Shiga-toxin producing <i>E. coli</i>.</p>	<p><i>Test Type:</i></p> <p><i>Reference Range:</i></p> <p><i>Specimen Requirements:</i></p> <p><i>Transport Temperature:</i></p> <p><i>Set up:</i></p> <p><i>Results available:</i></p> <p><i>CPT Code:</i></p>	<p>Culture</p> <p>No <i>Shigella</i> recovered</p> <p><b>Stool</b> preserved in Cary-Blair based transport media (VDHL Kit #1).</p> <p><b>Isolate</b> on agar slant (VDHL Kit#4).</p> <p>Room temperature: must be received within 3 days from date of collection</p> <p>Monday – Saturday</p> <p><b>Stool:</b> 3 days from date of receipt <b>Isolate:</b> 3-7 days from date of receipt</p> <p>87045/87077</p>

<b>Syphilis (RPR) (screen)</b>		
<p><b>The Rapid Plasma Reagin (RPR) is a macroscopic, nontreponemal screening procedure for the serologic detection of syphilis.</b></p> <p><b>Reactive RPR specimens are quantitated and a FTA-ABS test is performed to confirm reactive RPR results.</b></p>	<p><i>Test Type:</i></p> <p><i>Reference Range:</i></p> <p><i>Specimen Requirements:</i></p> <p><i>Transport Temperature:</i></p> <p><i>Set up: Results</i></p> <p><i>Available:</i></p> <p><i>CPT Code:</i></p>	<p>Agglutination</p> <p>Non-reactive</p> <p>0.5mL serum (VDHL Kit #13/14)</p> <p>2-8°C. Specimen should be received at VDHL within 48 hours.</p> <p>Monday, Wednesday, Friday</p> <p>Within 4 working days for negative results</p> <p>86592</p>

**Syphilis Fluorescent Treponemal Antibody-Absorption (FTA-ABS)**

<p>FTA-ABS test has never been and is not now being recommended as a routine screening test for syphilis. Its recommended use is to confirm the reactive results of a sensitive, but less specific screening test for syphilis, such as the RPR as a specific diagnostic test in patients with signs or symptoms suggestive of late syphilis.</p>	<p><i>Test Type:</i> Indirect Fluorescent Antibody</p> <p><i>Reference Range:</i> Non-reactive</p> <p><i>Specimen Requirements:</i> 0.5mL serum (VDHL Kit #13/14) As</p> <p><i>Set up:</i> needed</p> <p><i>Transport Temperature:</i> 2-8°C. Specimen should be received at VDHL within 48 hours.</p> <p><i>Results Available:</i> Within 1-4 working days</p> <p><i>CPT Code:</i> 86781</p>	
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**Syphilis VDRL**

<p>The Venereal Disease Research Laboratory (VDRL) test is a slide micro-flocculation test for syphilis.</p>	<p><i>Test Type:</i> Flocculation</p> <p><i>Reference Range:</i> Non-reactive</p> <p><i>Specimen Requirements:</i> 0.5mL <b>Cerebrospinal Fluid (CSF) ONLY</b></p> <p><i>Set up:</i> As needed</p> <p><i>Transport Temperature:</i> 2-8°C. Specimen should be received at VDHL within 48 hours.</p> <p><i>Results Available:</i> Within 1-3 working days</p> <p><i>CPT Code:</i> 86592</p>	
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<b>Tularemia Total Antibody</b>		
<ul style="list-style-type: none"> <li>A single titer of 1:20 or below are usually not diagnostic for infection with <i>Francisella tularensis</i></li> <li>Tularemia titers of 1:160 are strongly suggestive of Tularemia. However, a progressive increase in titer between acute and convalescent specimens is the prime evidence of recent infection. Confirmation of serodiagnosis requires demonstration of a four-fold titer difference between acute and convalescent specimens taken at appropriate times.</li> </ul> <p>Cross-reactions may occur between <i>Brucella abortus</i> and <i>Francisella tularensis</i> antigens and antisera. Therefore, both assays will be run on one specimen.</p>	<p><i>Test Type:</i> Agglutination</p> <p><i>Reference Range:</i> &lt;1:20</p> <p><i>Specimen Requirements:</i> 1.0mL serum (VDHL Kit #13/14)</p> <p><i>Set up:</i> Monday – Wednesday as needed</p> <p><i>Transport Temperature:</i> -20°C (dry ice)</p> <p><i>Results Available:</i> Within 4 working days</p> <p><i>CPT Code:</i> 86668</p>	

<b>Varicella IgG Antibody</b>		
<p>A reactive result indicates immunity to Varicella infection</p>	<p><i>Test Type:</i> EIA</p> <p><i>Reference Range:</i> Varicella antibody not detected</p> <p><i>Specimen Requirements:</i> 1.0mL (minimum 0.25mL) serum (VDHL Kit #13/14)</p> <p><i>Set up:</i> Tuesday and Friday</p> <p><i>Transport Temperature:</i> 2-8°C. Specimen should be received at VDHL within 48 hours.</p> <p><i>Results Available:</i> Within 1-4 working days</p> <p><i>CPT Code:</i> 86787</p>	

***Vibrio* spp.**

<p><b>Isolation and identification of <i>Vibrio</i> spp.</b></p>	<p><i>Test Type:</i> Culture</p> <p><i>Reference Range:</i> No <i>Vibrio</i> isolated</p> <p><i>Specimen Requirements:</i> Stool preserved in Cary-Blair based transport media (VDHL Kit #1)</p> <p><i>Set up:</i> As needed</p> <p><i>Transport Temperature:</i> Room temperature: must be received within 3 days from date of collection</p> <p><i>Results Available:</i> 3 days from date of receipt</p> <p><i>CPT Code:</i> 87046/87077</p>	
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***Yersinia enterocolitica* (see also Enteric Screen)**

<p><b>Isolation and identification of <i>Yersinia enterocolitica</i>.</b></p> <p><b>This test may be ordered individually or as part of the <u>Enteric Screen</u>, which includes the enteric pathogens <i>Campylobacter</i>, <i>Salmonella</i>, <i>Shigella</i>, <i>Yersinia enterocolitica</i>, <i>E. coli</i> O157:H7, and non-O157:H7 Shiga-toxin producing <i>E. coli</i>.</b></p>	<p><i>Test Type:</i> Culture</p> <p><i>Reference Range:</i> No <i>Y. enterocolitica</i> isolated</p> <p><i>Specimen Requirements:</i> Stool preserved in Cary-Blair based transport media (VDHL Kit #1)</p> <p><i>Set up:</i> Monday – Saturday</p> <p><i>Transport Temperature:</i> Room temperature: must be received within 3 days from date of collection</p> <p><i>Results Available:</i> 3 days from date of receipt</p> <p><i>CPT Code:</i> 87045/87077</p>	
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