Southern Nevada Public Health Laboratory
TEST MENU

Complete Blood Count (CBC)

<table>
<tr><td>Method</td><td>Sysmex® XN-2000 multi-parameter automated hematology analyzer - the hydrodynamic focusing (DC Detection), flow cytometry method (semiconductor laser), and SLS-hemoglobin method.</td></tr>
<tr><td>CPT Code</td><td>85027</td></tr>
<tr><td>Specimen</td><td>Whole blood – Required Volume: 1mL
RBT Micro tube – 250uL
Minimum specimen volume: 1mL</td></tr>
<tr><td>Collect in</td><td>EDTA-2K or EDTA-3K anticoagulant tube</td></tr>
<tr><td>Labeling</td><td>Label with patient's full name, date of birth, collection date, and time.</td></tr>
<tr><td>Processing</td><td>Processing Serum: Allow refrigerated samples to come to room temperature and mix well before analysis. Do not place CBC and Diff samples on a mechanical rocker. Constant rocking may alter white cell membranes, resulting in false interpretive messages.</td></tr>
<tr><td>Transport</td><td>Store and transport refrigerated (2-8°C) within 48 hours
Room temperature stability is 24 hours.
Keep tube tightly capped for storage.</td></tr>
<tr><td>Sample Rejection</td><td>- Mislabeled/unlabeled specimen
- Specimen quantity not sufficient for testing (QNS)
- Specimen contains fibrin or clots.
- Excessive platelet clumping
- Substandard mixing or collection</td></tr>
<tr><td>Requisition</td><td>SNPHL Request Forms</td></tr>
<tr><td>Turn Around Time</td><td>24-48 Hours</td></tr>
<tr><td>Results</td><td>Reference Range:
Adult:
<table>
<tr><th>Parameter</th><th>Males (21-99)</th><th>Females (21-99)</th><th>Units</th></tr>
<tr><td>WBC</td><td>3.18-12.74</td><td>2.74-10.9</td><td>x103/mcL</td></tr>
<tr><td>RBC</td><td>4.08-5.80</td><td>3.62-5.76</td><td>X106/mcL</td></tr>
<tr><td>HGB</td><td>12.3-17.2</td><td>10.7-16.7</td><td>gm/dL</td></tr>
<tr><td>HCT</td><td>37-52</td><td>33-50</td><td>%</td></tr>
<tr><td>MCV</td><td>83.0-97.0</td><td>79.4-99.5</td><td>fL</td></tr>
<tr><td>MCH</td><td>27.3-32.4</td><td>24.8-33.8</td><td>Pg</td></tr>
<tr><td>MCHC</td><td>31.3-35.1</td><td>30.6-34.9</td><td>gm/dL</td></tr>
<tr><td>RDW-CV</td><td>11.4-14.7</td><td>11.0-15.1</td><td>%</td></tr>
<tr><td>RDW-SD</td><td>35.3-50.7</td><td>37.6-47.5</td><td>fL</td></tr>
<tr><td>IPF</td><td>1.23-8.70</td><td>Same as Males</td><td>%</td></tr>
<tr><td>PLT</td><td>140-400</td><td>Same as Males</td><td>x103/mcL</td></tr>
<tr><td>MPV</td><td>7.2-12.6</td><td>Same as Males</td><td>fL</td></tr>
<tr><td>NRBC%</td><td>0.0-0.2</td><td>Same as Males</td><td>/100WBC</td></tr>
<tr><td>NRBC#</td><td>0.0-0.01</td><td>Same as Males</td><td>x103/mcL</td></tr>
<tr><td>RETIC %</td><td>0.51-1.81</td><td>0.50-1.70</td><td>%</td></tr>
<tr><td>RETIC ABS</td><td>2.60-9.50</td><td>1.64-7.76</td><td>104/mcL</td></tr>
<tr><td>IRF</td><td>0.0-3.4</td><td>0.0-3.5</td><td>%</td></tr>
</table></td></tr>
<tr><td>Reported</td><td>System generated fax; Electronic transmission</td></tr>
<tr><td>Limitations</td><td>Specimens must be free of clots and fibrin strands.
Severely hemolyzed samples (in vitro) falsely decrease RBC and hematocrit.</td></tr>
<tr><td>Contact</td><td>Southern Nevada Public Health Laboratory – Clinical Laboratory Department</td></tr>
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