Lab Dept: Chemistry

Test Name: DEMEROL LEVEL

General Information

Lab Order Codes: DEM

Synonyms: Meperidine; Normeperidine

CPT Codes: G0480 – Drug, test, definitive
or
80362 – Opiods and opiate analogs; 1 or 2

Test Includes: Meperidine, Normeperidine levels reported in ng/mL.

Logistics

Test Indications: Monitoring Demerol levels.

Lab Testing Sections: Chemistry - Sendouts

Referred to: MedTox Laboratories (MedTox Test: 67)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 day

Special Instructions: Trough levels are most reproducible.

Specimen

Specimen Type: Blood

Container: Red top NO GEL tube
Alternate: Green top NO GEL tube

Draw Volume: 9 mL (Minimum: 1.8 mL) blood

Processed Volume: 3 mL (Minimum: 0.6 mL) serum/plasma

Note: Submission of the minimum volume results in an elevated reporting limit and inability to repeat analysis.
**Collection:** Routine venipuncture

**Special Processing:** Lab Staff: Centrifuge specimen, remove serum/plasma aliquot into a screw-capped round bottom plastic vial. Store and ship at refrigerated temperatures. Forward promptly.

**Patient Preparation:** None

**Sample Rejection:** Mislabeled or unlabeled specimens

### Interpretive

**Reference Range:**

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<tr>
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<th>Meperidine:</th>
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<tr>
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<td>400 – 700 ng/mL</td>
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<th>Normeperidine:</th>
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<tbody>
<tr>
<td></td>
<td>Results reported in ng/mL</td>
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**Critical Values:**

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<thead>
<tr>
<th></th>
<th>Meperidine:</th>
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<tbody>
<tr>
<td></td>
<td>&gt;1500 ng/mL</td>
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<tr>
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<th>Normeperidine:</th>
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<td>&gt;1000 ng/mL</td>
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**Limitations:**

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<tr>
<th></th>
<th>Meperidine reporting limit:</th>
<th>&lt;50 ng/mL</th>
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<th>Normeperidine reporting limit:</th>
<th>&lt;50 ng/mL</th>
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**Methodology:** Liquid Chromatography/Tandem Mass Spectrophotometry (LC/MS/MS)

**References:** [MedTox Laboratories Web Site](http://www.medtoxlabs.com) December 2017

**Updates:**

- 5/6/2010: CPT updated, previously listed as 83925 x2
- 1/6/2015: CPT update
- 7/13/2015: Reference range update from Medtox for Meperidine, previously listed as 200-800 ng/mL, method update.
- 2/4/2016: CPT update
- 11/4/2016: Tube update, CPT update