water & dialysate testing services
Spectra Laboratories, the leading provider of renal-specific testing services, offers clinicians comprehensive water and dialysate testing to help monitor the safety and efficacy of the dialysis treatments delivered to their patients.

**Why Routine Water Testing is Important**

Because hemodialysis patients are typically exposed to 300-400 liters of dialysate each week, the water used to prepare it must be carefully monitored and controlled on a regular basis to ensure the highest quality.

**Our Tests are Designed to Help You**

- Monitor the effectiveness of your facility’s water treatment system
- Identify contaminants that may compromise patient care
- Comply with federal regulations for dialysis water quality

**Keeping Your Patients Safe**

We recognize that even the low levels of chemicals, bacteria, and endotoxins found in municipal water, if transferred to dialysate, may be hazardous to dialysis patients. That’s why we provide state-of-the-art water testing services to help safeguard your patients.
**Comprehensive Water & Dialysate Testing**

Spectra offers a wide range of tests including:

### Trace Elements
- Aluminum
- Antimony
- Arsenic
- Barium
- Beryllium
- Cadmium
- Calcium
- Chromium
- Copper
- Fluoride
- Iron
- Lead
- Magnesium
- Mercury
- Nickel
- Nitrate
- pH
- Phosphorus
- Potassium
- Resistivity
- Selenium
- Silver
- Sodium
- Sulfate
- Thallium
- Zinc

### Total Viable Microbial Count
- Bicarbonate
- Dialysate
- Water
- Reuse Sterile Dialyzer Fluid

### Endotoxin (LAL) Detection
- Dialysate
- Water
- Bicarbonate

### Ultrapure Dialysate
- Endotoxins
Proper Specimen Collection and Handling
Quality results begin with quality specimen collection and handling techniques. Spectra provides comprehensive written instructions and visual aids to assist in the proper collection and handling of specimens before they reach the laboratory for analysis.

Expertise You Can Rely On
Our Clinical Laboratory Scientists have years of laboratory experience, training, and knowledge to ensure proper handling of your specimens.

State-of-the-Art Analysis Methods
At Spectra, we invest in the latest technologies and cutting-edge instrumentation for accurate results and faster turnaround times.

Specimens are immediately processed upon arrival at the laboratory
- **Trace Elements**
  - Dionex® ICS-600 (dual channel ion chromatography system)
  - Agilent 7500 ce ICP-MS (inductively coupled plasma mass spectroscopy system)
- **Total Viable Microbial Count**
  - Heterotrophic Plate Count (HPC) spread plate technique
  - Automated colony count reader
- **Endotoxin (LAL) Detection**
  - Kinetic Quantitative Chromogenic Test
  - Tecan® Freedom EVO® automated pipettor
  - Incubating plate reader

Web-based Results
Spectra delivers timely, reliable results, so you have the information you need to make timely decisions regarding your facility’s water treatment system and your patient’s care.
Helping You Meet Industry Guidelines

We provide dialysis facilities the necessary tests to ensure their water quality is in compliance with the latest guidelines established by the Association for the Advancement of Medical Instrumentation (AAMI) and the Centers for Medicare and Medicaid Services (CMS).

Spectra adheres to the most stringent industry testing standards, so you can achieve optimal water quality for your dialysis patients.

Published Guidelines for Bacteriology and Endotoxin Levels

<table>
<thead>
<tr>
<th>Conditions for Coverage ref 42 CFR 494.40</th>
<th>Dialysate for hemodialysis</th>
<th>Concentrates for hemodialysis</th>
<th>Water treatment equipment for hemodialysis applications</th>
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<tbody>
<tr>
<td><strong>Bacteriology</strong></td>
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<tr>
<td>Water</td>
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<td>&lt;200 CFU/mL</td>
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<tr>
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<td>50 CFU/mL</td>
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<tr>
<td><strong>Endotoxin</strong></td>
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<tr>
<td>Water</td>
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</tbody>
</table>
Education and Support
At Spectra, we make it a point to work side by side with our customers to help them achieve optimal results. We provide:

- Instructions on proper specimen collection, preparation, and handling
- Sterile containers, specially designed for water testing
- Ongoing consultation from our team of clinical laboratory specialists

Accreditations and Certifications
Spectra Laboratories adheres to rigorous regulatory standards in the industry through various certifications and accreditations:

- The Joint Commission
- College of American Pathologists (CAP)
- Clinical Laboratory Improvement Amendments (CLIA)
- American Association for Laboratory Accreditation (A2LA) ISO 15189
- California Clinical Laboratory License
- New Jersey Clinical Laboratory License
- New York State Environmental Laboratory Approval Program (ELAP)

References

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