

Washington State Medical Test Site Rules  
**PRE-INSPECTION SELF-ASSESSMENT CHECKLIST**

**MODERATE COMPLEXITY CHEMISTRY TESTS**

SPECIALTY: Chemistry

SUBSPECIALTIES: Routine Chemistry  
 Endocrinology  
 Toxicology  
 Urinalysis

TEST COMPLEXITY: Moderate

Examples of moderate complexity chemistry tests: Chemistry panels; electrophoresis; drug screening; therapeutic drug monitoring; arterial blood gases; urine test strip by instrument. Refer to the test complexity listing at: [www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfCLIA/search.cfm](http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfCLIA/search.cfm).

**PROFICIENCY TESTING:**

Proficiency testing is **required** for analytes specified in 42 CFR Subpart H & I (CLIA). For chemistry these “regulated analytes” are:

**Routine Chemistry:**

ALT/GPT  
 Albumin  
 Alkaline phosphatase  
 Amylase  
 AST/GOT  
 Bilirubin  
 Blood gases  
 Calcium  
 Cholesterol  
 Chloride  
 Creatine kinase (CK)  
 CK isoenzymes  
 Creatinine  
 Glucose  
 HDL cholesterol  
 Iron  
 Lactate dehydrogenase (LD)  
 LD isoenzymes  
 Magnesium  
 Potassium  
 Sodium  
 Total protein  
 Triglycerides  
 Urea nitrogen  
 Uric Acid

**Endocrinology:**

Cortisol  
 Free Thyroxine  
 Serum pregnancy (HCG)  
 T3 Uptake  
 Triiodothyronine  
 TSH  
 Thyroxine

**Toxicology:**

Alcohol, blood  
 Blood lead  
 Carbamazepine  
 Digoxin  
 Ethosuximide  
 Gentamicin  
 Lithium  
 Phenobarbital  
 Phenytoin  
 Primidone  
 Procainamide  
 Quinidine  
 Theophylline  
 Tobramycin  
 Valproic acid

**Biannual verification of accuracy** is required for all tests that are not waived or are not on this list.

**PERSONNEL**

- \_\_\_ The director, technical consultant, clinical consultant and testing personnel meet personnel qualifications for moderate complexity testing [42 CFR subpart M (CLIA) – Available from the LQA Office, or online at: [www.phppo.cdc.gov/clia/regs/toc.asp](http://www.phppo.cdc.gov/clia/regs/toc.asp)]
- \_\_\_ Documentation of personnel education, experience, training for the testing performed
- \_\_\_ Assessment of personnel competency initially, at 6 months and annually thereafter
- \_\_\_ Documentation that training is provided to personnel when problems are identified
- \_\_\_ Written laboratory safety policies and evidence that staff adhere to them

**QUALITY CONTROL**

- \_\_\_ Procedures are written for specimen collection and handling, test performance, reporting of results, quality control and quality assurance
- \_\_\_ Technical procedures include principle, specimen required, equipment/reagents needed, directions for performing the test, sources of error, interpretation of results, criteria for repeating/referring specimens for further review, reporting protocol and references
- \_\_\_ Test kits and reagents correctly labeled, stored at the proper temperatures and used within expiration dates
- \_\_\_ Documentation that equipment/procedure calibration done upon implementation of method, as required by manufacturer, and when controls show shifts, trends or are out of limits.
- \_\_\_ Calibration verification performed, using materials at the low, mid and upper limits of reportable range, every 6 months AND when there is a complete change of reagents, major maintenance, and when controls show trends, shifts or are out of limits
- \_\_\_ Worksheets, printouts, tapes available for most recent two years
- \_\_\_ Documentation of new instrument/test validation studies
- \_\_\_ Reference ranges established/verified for control materials and documentation available
- \_\_\_ Patient reference ranges available and verified
- \_\_\_ Documentation that appropriate quality control has been performed, evaluated for shifts and trends and reviewed (See attached table for specific requirements)
- \_\_\_ Reference books, instrument operator's and technical manuals available on site
- \_\_\_ Equipment maintenance performed as appropriate and documented
- \_\_\_ Corrective actions documented
- \_\_\_ Documentation that reagents prepared/stored and used at proper temperatures

## QUALITY ASSURANCE

- \_\_\_ Written quality assurance plan available
- \_\_\_ Quality assurance policies written and evidence of evaluation and review of quality control results, proficiency testing results, biannual verification of accuracy of tests, quality assurance activities and patient test results available
- \_\_\_ Written policies for how problems identified and complaints handled and instructions for documenting and correcting problems and resolving complaints and any other remedial actions taken
- \_\_\_ Written instructions for specimen collection, handling, preservation and transportation
- \_\_\_ Written criteria for accepting and rejecting specimens
- \_\_\_ Policies written defining critical values, reporting critical results and corrected reports
- \_\_\_ Refer specimens only to a lab with valid medical test site license or meeting equivalent HCFA requirements
- \_\_\_ Procedure for providing clients updates of testing changes that would affect test results or their interpretation
- \_\_\_ Adequate space and facilities available
- \_\_\_ Local, state and federal regulations for infection control, hazardous/infectious waste disposal adhered to and documented

## RECORDS

- \_\_\_ Patient test orders (requisitions) include: patient name or identifier, name and address or identifier of person ordering the test, date and time of specimen collection, source of specimen and patient age (or date of birth) and sex
- \_\_\_ Patient test records include date sample received, date tested and identification of person who performed test
- \_\_\_ Test reports include: name and address of where tests were performed, patient name and identifier, date (and time, if appropriate) results reported, unit of measure for each value, specimen source and limitations and normal ranges
- \_\_\_ Equipment function checks kept 2 years and maintenance records for life of instrument
- \_\_\_ Lot numbers, expiration dates of kits, reagents, controls, calibrators, standards kept 2 years
- \_\_\_ Records kept for 2 years: requisitions, testing records, patient reports of results, quality control results, proficiency testing data; biannual verification of accuracy of tests, preventive/unusual maintenance records, quality assurance activities

Subspecialty/Test	Qualitative		Quantitative	
	Control Material	Frequency	Control Material	Frequency
<b>Routine Chemistry</b>	<ul style="list-style-type: none"> <li>Positive and negative reference material</li> </ul>	<ul style="list-style-type: none"> <li>Each day of use</li> </ul>	<ul style="list-style-type: none"> <li>Two levels of reference material in different concentrations</li> </ul>	<ul style="list-style-type: none"> <li>Each day of use</li> </ul>
<ul style="list-style-type: none"> <li><b>Toxicology</b></li> <li>GC/MS for drug screening</li> <li>Urine drug screen</li> </ul>	<ul style="list-style-type: none"> <li>Analyte-specific control</li> <li>Positive control containing at least one drug representative of each drug class to be reported; must go through each phase of use including extraction</li> </ul>	<ul style="list-style-type: none"> <li>With each run of patient specimens</li> <li>With each run of patient specimens</li> </ul>	<ul style="list-style-type: none"> <li>Analyte-specific control</li> </ul>	<ul style="list-style-type: none"> <li>With each analytical run</li> </ul>
<b>Urinalysis</b>			<ul style="list-style-type: none"> <li>Two levels of control material</li> <li>Calibrate to zero with distilled water</li> <li>One level of control material</li> </ul>	<ul style="list-style-type: none"> <li>Each day of use</li> <li>Each day of use</li> </ul>
<ul style="list-style-type: none"> <li>Non-waived instrument</li> <li>Refractometer for specific gravity</li> </ul>				
<b>Blood Gas Analysis</b>			<ul style="list-style-type: none"> <li>Two-point calibration and one reference material</li> <li>One-point calibration or one reference material, or</li> <li>Another calibration and reference material schedule, approved by the department</li> </ul>	<ul style="list-style-type: none"> <li>Each 8 hours of testing</li> <li>Each time patient sample is tested, unless automated instrument internally verifies calibration every 30 minutes</li> </ul>
<b>Electrophoresis</b>	<ul style="list-style-type: none"> <li>One control containing fractions representative of those routinely reported in patient specimens</li> </ul>	<ul style="list-style-type: none"> <li>In each electrophoretic cell</li> </ul>	<ul style="list-style-type: none"> <li>One control containing fractions representative of those routinely reported in patient specimens</li> </ul>	<ul style="list-style-type: none"> <li>In each electrophoretic cell</li> </ul>