

PROCEDURE

Corewell Health East - Chemistry Quality Control Frequency - Trenton

This Procedure is Applicable to the following Corewell Health sites:
Corewell Health Trenton Hospital

Applicability Limited to: N/A

Reference #: 34207

Version #: 2

Effective Date: 11/12/2025

Functional Area: Clinical Operations, Laboratory

Lab Department Area: Lab - Chemistry

1. Purpose

This document provides the laboratory technical staff with a schedule of instrumentation and frequency of Quality Control material within the Chemistry Department.

2. Responsibility

Personnel who have completed the competency requirements will perform this testing.

3. Quality Control

Analyzer	Control	Frequency
ci4100	Bio-Rad Multiquel Unassayed Chemistry	
Chloride	Level 1, Level 3	3x / Day
Potassium		
Sodium		
Albumin	Level 1, Level 3	Daily
Alkaline Phosphatase		
Alanine Aminotransferase		
Amylase		
Aspartate Aminotransferase		
Bicarbonate		
Calcium		
Creatine Kinase		
Creatinine	Level 1, Level 3	Daily
Creatinine, Enzymatic		
Direct Bilirubin		
Glucose		
Lactate Dehydrogenase		
Lactic Acid		

Entities will reference associated Documentation contained within this document as applicable
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Lipase		
Magnesium		
Phosphorus		
Total Bilirubin		
Total Protein		
Urea		
Uric Acid		
Analyzer	Control	
ci4100	Bio-Rad Immunoassay Plus	Frequency
Acetaminophen		
Beta-Human Chorionic Gonadotropin (BHCG)		
Digoxin		
Free Thyroxine (FT4)		
Salicylate		
Thyroid Stimulating Factor (TSH)		
Valproic Acid		
Vancomycin		
Analyzer	Control	
ci4100	Bio-Rad Liquichek Ethanol / Ammonia	Frequency
Ethanol		
Ammonia		
Analyzer	Control	
ci4100	Bio-Rad Cardiac Markers Plus LT	Frequency
Brain Natriuretic Peptide (BNP)		
Troponin		
Analyzer	Control	
ci4100	UTAK Amphetamine Plus	Frequency
Amphetamine		
Barbituate		
Benzodiazepine		
Cannabinoid		
Cocaine		
Fentanyl		
Methadone		
Opiate		
Oxycodone		
Phencyclidine		

Analyzer	Control	
ci4100	Bio-Rad Spinal Fluid	Frequency
Cerebral Spinal Fluid (CSF) Glucose		
Cerebral Spinal Fluid (CSF) Protein		
Analyzer	Control	Frequency

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ci4100	Bio-Rad Specialty Immunoassay(Lyphocheck)	
Procalcitonin (PCT)	Level 1, Level 2, Level 3	Daily
Analyzer	Control	Frequency
ci4100	Bio-Rad Urine Chemistry	
Urine Creatinine	Level 1, Level 2	Daily
Urine Protein		
Analyzer	Control	Frequency
ci4100	Stanbio Beta-hydroxybutyrate	
Beta-hydroxybutyrate (BHOB)	Level 1, Level 2	As Needed
Analyzer	Control	Frequency Auto Programmed
ABL800 Flex	Radiometer America AutoCheck 5+	
pH	Level 1, Level 2, Level 3	1 level every 8 hours
pCO2		
pO2		
Sodium		
Potassium		
Calcium, ionized		
Chloride		
Lactate		
Carboxyhemoglobin		
Methemoglobin		
Oxyhemoglobin		
Glucose		

- A. All applicable control levels must be run after calibration of any method or parameter, after any maintenance, repair, reagent change or extended power failure.
- B. Corewell Health Trenton Laboratory is enrolled in Bio-Rad Unity Real Time program, Radiometer Aqure and Stanbio Peer Group Monitoring. These programs provide calculations for mean, standard deviation and coefficient of variation.
- C. Quality control is reviewed by a Lead Medical Technologist at least monthly.

4. Revisions

Corewell Health reserves the right to alter, amend, modify or eliminate this document at any time without prior written notice.

5. Procedure Development and Approval

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6. Keywords

Not Set