

Lab Chemistry Standardization – Des Moines, Pathology Laboratory & North Ankeny



The intent of this reference is to provide a resource for the Lab Chemistry Standardization changes impacting clinicians in the Des Moines market hospital and clinic settings, Pathology Laboratory & North Ankeny.

Overview	2
Des Moines Lab Chemistry Contacts	2
Focused Lab Tests & Order Changes – Hospital & Clinics	3
Units of Measure & Reference Range Changes	4
DM Lutheran Reference Range and Units of Measure Changes	4
DM Methodist West Reference Range and Units of Measure Changes	11
DM Methodist Reference Range and Units of Measure Changes	16
Pathology Laboratory Units of Measure & Reference Range Changes	24
North Ankeny Units & Reference Range	37
Clinical Laboratory Test Catalog Updates	41
Ambulatory Pathway Changes (Clinic)	41
Order Set Changes (Hospital/ED)	42
Lab Staff – Sunquest Order Code Changes	42

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

Overview

UnityPoint Health System Laboratory has been working to standardize chemistry instrumentation and laboratory test orders across the system to ensure consistent reference ranges and units of measure where possible. This effort includes configuring new instrument interfaces within the Sunquest Laboratory Information System. Regional Chemistry laboratory experts from across the system participated in a comprehensive review of chemistry lab orders, including reference ranges and units of measure to be standardized. These recommendations have been reviewed and approved by the Laboratory Clinical Service Group.

Many of the changes are being made behind the scenes in the Sunquest and Epic systems. This includes making front-facing changes to lab test orders and results in Epic. The transition will impact ordering workflows including modifications to preference lists, order sets and ambulatory pathways.

The changes for Des Moines, Pathology Laboratory & Ankeny North will move to the production (PRD) environment on June 16th, 2026 at 10:00 a.m.

Des Moines Lab Chemistry Contacts

Who will be the main point of contact for our providers and/or lab staff when we have questions or concerns?

There is a team of leaders here to support you during this transition. Please feel free to reach out to any one of the following with questions or concerns:

- Regional Informatics EPIC support
- For Lab Chemistry Leader DML, contact: Ann Blackford
- For Lab Chemistry Leader DMM, contact: Charmaine Cabelin
- For Lab Chemistry Leader DMW, contact: George Ndemi
- For Laboratory Manager contact: Linda Bates (ILH/MWH), Daniel Reece (IMMC)
- For Laboratory Director contact: Carrie Beck
- For general questions, contact Amy Job at amy.job@unitypoint.org

Pathology Laboratory Lab Chemistry Contacts

Who will be the main point of contact for our providers and/or lab staff when we have questions or concerns?

- For Laboratory Chemistry Leader, contact: Sarah Juhl
- For Laboratory Chemistry Leader North Ankeny, contact: Teresa Finken
- For Laboratory Manager contact: Rachel Whitman (Path Lab)
- For Laboratory Manager: Sue Burt (North Ankeny)
- For Laboratory Director contact: Carrie Beck
- For general questions contact Amy Job at amy.job@unitypoint.org

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

Focused Lab Tests & Order Changes – Hospital & Clinics

The following chemistry lab testing changes will be visible to clinicians. The table below identifies the existing lab order that will be removed and other lab order option(s) to use instead. The table also identifies net new lab tests that will now be available.

Preference List Impact: Facility Preference lists will be updated by IT. User Preference list updates will need to be completed by the individual user to remove the current lab order and replace with the new lab order starting Tuesday, June 16th, 2026, after 10:00 a.m.

Facility	Current Lab Order & ID, New, or Removal	New Lab Order & ID to use starting 6/16/2026
DML, DMM, DMW Hospitals & clinics, All CIA Clinics, Pathology Laboratory	Cystatin C (LAB4447)	Cystatin C (LAB3018)
DML, DMM, DMW Hospitals & clinics, All CIA Clinics, Pathology Laboratory	Hepatitis B Surface Antibody (LAB472)	Hepatitis BS AB QL/QN (LAB3480)
DML, DMM, DMW Hospitals & clinics, All CIA Clinics, Pathology Laboratory	Iron Binding Capacity (TIBC) (LAB2739)	N/A
DML, DMM, DMW Hospitals & clinics, All CIA Clinics, Pathology Laboratory	Lidocaine (LAB2581)	N/A
DML, DMM, DMW Hospitals & clinics, All CIA Clinics, Pathology Laboratory	NEW	TSH with Free T4 Reflexive (LAB5113) *Note: Reflexes when TSH is <0.27 on lower end and >4.20 on the upper end. Matches Mayo, ARUP, and U of IA algorithm. Age >18 only.
DML, DMM, DMW Hospitals & clinics, All CIA Clinics, Pathology Laboratory	NEW	Fractional NA Excretion (LAB4279)
DML, DMM, DMW Hospitals & clinics, All CIA Clinics, Pathology Laboratory	NEW	Convert BMP to CMP (LAB2380) *Note: This test runs the additional components without requiring additional billing. You will need to place this new order to convert the existing BMP to a CMP.
DML, DMM, DMW Hospitals & clinics, All CIA Clinics, Pathology Laboratory	NEW	Urine Microalbumin Random (LBA2109)
Pathology Laboratory ONLY	NEW	Microalbumin 24 HR (LAB410)

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

Units of Measure & Reference Range Changes

The following labs will have a new unit of measurement and/or reference range that will impact result values.

Clinic locations who send these chemistry related labs or patients present for an outpatient lab draw within the Des Moines market including Pathology Laboratory & North Ankeny, they will see these lab order unit of measure changes for the tests identified.



Please note units of measure when interpreting results.

DM Lutheran Reference Range and Units of Measure Changes

Current Lab Test	Current Unit of Measure & Reference Range			New Unit of Measure & Reference Range starting 6/16/2026		
Anion Gap				6-14 mmol/L		
Albumin	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	2.8-4.4 g/dL	F	0	2.8-4.4 g/dL
	F	5D	3.8-5.4 g/dL	F	5D	3.8-5.4 g/dL
	F	15	3.2-4.5 g/dL	F	15	3.2-4.5 g/dL
	F	19	3.5-5.2 g/dL	F	18	3.5-5.2 g/dL
	M	0	2.8-4.4 g/dL	M	0	2.8-4.4 g/dL
	M	5D	3.8-5.4 g/dL	M	5D	3.8-5.4 g/dL
	M	15	3.2-4.5 g/dL	M	15	3.2-4.5 g/dL
	M	19	3.5-5.2 g/dL	M	18	3.5-5.2 g/dL
Alcohol Level	< 10 mg/dL			< 11 mg/dL <i>*See Interpretive Note appending to results below</i>		
<p><i>*Interpretive Note: The result of "Not Detected" will appear if alcohol level is below 11 mg/dL and the following result comment will be appended, "This assay is not able to detect alcohol levels below 11 mg/dL."</i></p> <p><i>This test is for medical purposes only and not to be used for a legal blood alcohol limit.</i></p>						
Alkaline Phosphatase	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	83-248 U/L	F	0	83-248 U/L
	F	15D	122-469 U/L	F	15D	122-469 U/L
	F	1	142-335 U/L	F	1	142-335 U/L
	F	10	129-417 U/L	F	10	129-417 U/L
	F	13	57-254 U/L	F	13	57-254 U/L
	F	15	50-117 U/L	F	15	50-117 U/L
	F	17	45-87 U/L	F	17	45-87 U/L
	F	19	35-104 U/L	F	18	35-104 U/L
	M	0	83-248 U/L	M	0	83-248 U/L

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

	M	15D	122-469 U/L	M	15D	122-469 U/L
	M	1	142-335 U/L	M	1	142-335 U/L
	M	10	129-417 U/L	M	10	129-417 U/L
	M	13	116-468 U/L	M	13	116-468 U/L
	M	15	82-331 U/L	M	15	82-331 U/L
	M	17	55-149 U/L	M	17	55-149 U/L
	M	19	40-129 U/L	M	18	40-129 U/L
ALT	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	<33 U/L	F	0	<33 U/L
	M	0	<41 U/L	F	18	10-35 U/L
				M	0	<41 U/L
				M	18	10-50 U/L
Amylase	U/L			U/L		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	1M	0-6	F	1M	0-6
	F	182D	1-17	F	182D	1-17
	F	1	6-44	F	1	6-44
	F	3	8-79	F	3	8-79
	F	17	21-110	F	17	21-110
	F	18	26-102	F	18	28-100
	M	1M	0-6	M	1M	0-6
	M	182D	1-17	M	182D	1-17
	M	1	6-44	M	1	6-44
	M	3	8-79	M	3	8-79
	M	17	21-110	M	17	21-110
	M	18	26-102	M	18	28-100
AST	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	8-50 U/L	F	0	8-50 U/L
	F	14	8-43 U/L	F	14	8-43 U/L
	M	0	8-60 U/L	F	18+	10-35 U/L
	M	18	8-48 U/L	M	0	8-60 U/L
			M	14	8-48 U/L	
			M	18+	10-50 U/L	
BUN/Creatinine Ratio	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0+	12.0-20.0	ALL	0+	12.0-20.0

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

BUN	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0+	6-20 mg/dL	ALL	0	6-20 mg/dL
				ALL	60+	8-23 mg/dL
Calcium	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	7.6-10.4 mg/dL	F	0	7.6-10.4 mg/dL
	F	10D	9.0-11.0 mg/dL	F	10D	9.0-11.0 mg/dL
	F	31D	9.0-11.0 mg/dL	F	31D	9.0-11.0 mg/dL
	F	2	8.8-10.8 mg/dL	F	2	8.8-10.8 mg/dL
	F	12	8.4-10.2 mg/dL	F	12	8.4-10.2 mg/dL
	F	19	8.5-10.5 mg/dL	F	18	8.6-10.0 mg/dL
	M	0	7.6-10.4 mg/dL	F	60	8.8-10.2 mg/dL
	M	10D	9.0-11.0 mg/dL	F	90	8.2-9.6 mg/dL
	M	31D	9.0-11.0 mg/dL	M	0	7.6-10.4 mg/dL
	M	2	8.8-10.8 mg/dL	M	10D	9.0-11.0 mg/dL
	M	12	8.4-10.2 mg/dL	M	31D	9.0-11.0 mg/dL
	M	19	8.5-10.5 mg/dL	M	2	8.8-10.8 mg/dL
				M	12	8.6-10 mg/dL
				M	18	8.6-10.0 mg/dL
				M	60	8.8-10.2 mg/dL
			M	90	8.2-9.6 mg/dL	
Creatinine Clearance Rate				Sex	Age	Reference Range
				ALL	18+	66-143 mL/min
Cholesterol/HDL Ratio				Sex	Age	Reference Range
				ALL	18+	<4.5
Cholesterol	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	18+	0-200 mg/dL	ALL	18+	<200 mg/dL
CK, Total	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0		ALL	0	
	ALL	3M	26-192 mg/dL	F	3M	26-192 mg/dL
				F	18+	26-192 mg/dL
			M	18+	39-308 mg/dL	
Creatinine	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	1	0.1-0.4 mg/dL	F	0	
	F	4	0.2-0.5 mg/dL	F	1	0.1-0.4 mg/dL
	F	6	0.3-0.6 mg/dL	F	4	0.2-0.5 mg/dL

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

	F	9	0.4-0.7 mg/dL	F	6	0.3-0.6 mg/dL
	F	16	0.6-1.1 mg/dL	F	9	0.4-0.7 mg/dL
				F	16	0.6-1.1 mg/dL
				F	18+	0.51-0.95
	M	1	0.1-0.4 mg/dL	M	0	
	M	3	0.1-0.5 mg/dL	M	1	0.1-0.4 mg/dL
	M	5	0.2-0.6 mg/dL	M	3	0.1-0.5 mg/dL
	M	10	0.3-0.7 mg/dL	M	5	0.2-0.6 mg/dL
	M	12	0.4-0.8 mg/dL	M	10	0.3-0.7 mg/dL
	M	14	0.5-0.9 mg/dL	M	12	0.4-0.8 mg/dL
	M	16	0.8-1.3 mg/dL	M	14	0.5-0.9 mg/dL
				M	16	0.8-1.3 mg/dL
				M	18+	0.67-1.17 mg/dL
C-Reactive Protein (CRP)	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0	0.0-0.5 mg/dL	ALL	0	0-5 mg/L
Bilirubin, Direct	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0	0.0-0.3 mg/dL	F	0	0.0-0.3 mg/dL
				F	18	0.0-0.2 mg/dL
				M	0	0.0-0.3 mg/dL
				M	18	0.0-0.2 mg/dL
*Note: Indirect Bilirubin calculation will be added to all UPH Standardized Chemistry panels that include Total Bilirubin and Indirect Bilirubin for all UPH markets.						
Iron	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	110-270 ug/dL	F	0	110-270 ug/dL
	F	5M	30-70 ug/dL	F	5M	30-70 ug/dL
	F	2	20-124 ug/dL	F	2	20-124 ug/dL
	F	3	53-119 ug/dL	F	3	53-119 ug/dL
	F	12	37-145 ug/dL	F	12	37-145 ug/dL
				F	18+	37-145 ug/dL
	M	0	110-270 ug/dL	M	0	110-270 ug/dL
	M	5M	30-70 ug/dL	M	5M	30-70 ug/dL
	M	2	20-124 ug/dL	M	2	20-124 ug/dL
	M	3	53-119 ug/dL	M	3	53-119 ug/dL
	M	12	59-158 ug/dL	M	12	59-158 ug/dL
				M	18+	61-157 ug/dL

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

Iron Saturation	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0	20-50%	ALL	0	20-50%
				ALL	18	14-50%
Glucose	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0	45-100 mg/dL	ALL	0	45-100 mg/dL
	ALL	1D	45-90 mg/dL	ALL	1D	45-90 mg/dL
	ALL	2D	60-90 mg/dL	ALL	2D	60-90 mg/dL
	ALL	3D	70-99 mg/dL	ALL	3D	70-99 mg/dL
	ALL	1M	70-99 mg/dL	ALL	1M	70-99 mg/dL
	ALL	18	70-99 mg/dL	ALL	18+	70-180 mg/dL
Glucose, Fasting	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0	45-100 mg/dL	ALL	0	45-100 mg/dL
	ALL	1D	45-90 mg/dL	ALL	1D	45-90 mg/dL
	ALL	2D	60-90 mg/dL	ALL	2D	60-90 mg/dL
	ALL	3D	70-99 mg/dL	ALL	3D	70-99 mg/dL
	ALL	31D	70-99 mg/dL	ALL	31D	70-99 mg/dL
	ALL	18+	70-100 mg/dL			
Indirect Bilirubin	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0		ALL	0	
	ALL	18	0-0.9 mg/dL			
Potassium	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0	3.5-6.0 mmol/L	ALL	0	3.5-6.0 mmol/L
	ALL	6M	3.5-6.0 mmol/L	ALL	6M	3.5-6.0 mmol/L
	ALL	10	3.5-5.1 mmol/L	ALL	10	3.5-5.1 mmol/L
			ALL	18	3.4-5.1 mmol/L	
LDH	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0	135-750 U/L	F	0	135-750 U/L
	ALL	31D	180-435 U/L	F	31D	180-435 U/L
	ALL	1	160-370 U/L	F	1	160-370 U/L
	ALL	4	145-345 U/L	F	4	145-345 U/L
	ALL	7	143-290 U/L	F	7	143-290 U/L
	ALL	10	120-293 U/L	F	10	120-293 U/L
	ALL	13	110-283 U/L	F	13	110-283 U/L
	ALL	16	105-233 U/L	F	16	105-233 U/L
	ALL	18	122-222 U/L	F	18	135-214 U/L

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

				M	0	135-750 U/L
				M	31D	180-435 U/L
				M	1	160-370 U/L
				M	4	145-345 U/L
				M	7	143-290 U/L
				M	10	120-293 U/L
				M	13	110-283 U/L
				M	16	105-233 U/L
				M	18	135-225 U/L
Magnesium	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0	1.6-2.6 mg/dL	ALL	0	1.6-2.6 mg/dL
				ALL	12	1.7-2.2 mg/dL
				ALL	20	1.6-2.6 mg/dL
				ALL	60	1.6-2.4 mg/dL
				ALL	90	1.7-2.3 mg/dL
PTH Intact	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0	15-65 pg/mL	ALL	0	15-65 pg/mL
				ALL	18	17.9-58.6 pg/mL
Rasuri Uric Acid	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	2.1-8.4 mg/dL	F	0	2.1-8.4 mg/dL
	F	1	1.9-5.4 mg/dL	F	1	1.9-5.4 mg/dL
	F	10	3.5-7.3 mg/dL	F	10	3.5-7.3 mg/dL
	F	19	3.2-7.1 mg/dL	F	18	2.4-5.7 mg/dL
	M	0	2.1-8.4 mg/dL	M	0	2.1-8.4 mg/dL
	M	1	1.9-5.4 mg/dL	M	1	1.9-5.4 mg/dL
	M	10	3.5-7.3 mg/dL	M	10	3.5-7.3 mg/dL
	M	19	3.8-8.2 mg/dL	M	18	3.4-7.0 mg/dL
Glucose, CSF	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	18	40-70 mg/dL	ALL	18	40-70 mg/dL
Bilirubin Total	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0	0.0-5.0 mg/dL	ALL	0	0.0-5.0 mg/dL
	ALL	1D	0.0-6.8 mg/dL	ALL	1D	0.0-6.8 mg/dL
	ALL	3D	0.0-5.9 mg/dL	ALL	3D	0.0-5.9 mg/dL
	ALL	7D	0.0-1.3 mg/dL	ALL	7D	0.0-1.3 mg/dL
	ALL	1M	0.0-1.0 mg/dL	ALL	1M	0.0-1.0 mg/dL

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

	ALL	18	0.4-1.3 mg/dL		ALL	18	<1.2 mg/dL
Total Iron Binding Capacity (TIBC)	Sex	Age	Reference Range		Sex	Age	Reference Range
	ALL	0	255-479 ug/dL		ALL	0	255-479 ug/dL
	ALL	18	250-400 ug/dL		ALL	18	250-400 ug/dL
Chloride, 24 HR Urine	Sex	Age	Reference Range		Sex	Age	Reference Range
	ALL	0	50-250 mmol/(24.h)		ALL	0	50-250 mmol/(24.h)
	ALL	18	110-250 mmol/(24.h)		ALL	18	110-250 mmol/(24.h)
Creatinine, 24H Urine	Sex	Age	Reference Range		Sex	Age	Reference Range
	F	0	800-1800 mg/(24.h)		F	0	800-1800 mg/(24.h)
	F	40	670-1350 mg/(24.h)		F	18	720-1510 mg/(24.h)
	F	50	640-1260 mg/(24.h)		M	0	1000-2000 mg/(24.h)
	F	60	600-1140 mg/(24.h)		M	18	980-2200 mg/(24.h)
	F	70	540-1020 mg/(24.h)				
	F	80	460-810 mg/(24.h)				
	F	0	800-1800 mg/(24.h)				
	M	0	1000-2000				
	M	40	770-1560				
	M	50	740-1450				
	M	60	690-1320				
	M	70	620-1180				
	M	80	530-930				
Uric Acid	Sex	Age	Reference Range		Sex	Age	Reference Range
	F	0	2.1-8.4 mg/dL		F	0	2.1-8.4 mg/dL
	F	1	1.9-5.4 mg/dL		F	1	1.9-5.4 mg/dL
	F	10	3.5-7.3 mg/dL		F	10	3.5-7.3 mg/dL
	F	19	3.2-7.1 mg/dL		F	18	3.2-7.1 mg/dL
	M	0	2.1-8.4 mg/dL		M	0	2.1-8.4 mg/dL
	M	1	1.9-5.4 mg/dL		M	1	1.9-5.4 mg/dL
	M	10	3.5-7.3 mg/dL		M	10	3.5-7.3 mg/dL
	M	19	3.8-8.2 mg/dL		M	18	3.8-8.2 mg/dL
	Protein, Urine	<10 mg/dL				Sex	Age
ALL		0	<10 mg/dL		ALL	0	<10 mg/dL
ALL		18			ALL	18	
Protein, 24H Urine	0-150 mg/dL				<150 mg/dL		
Vancomycin Peak	25-50 ug/mL				Sex	Age	Reference Range

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

		ALL	0	25-50 ug/mL
		ALL	18	20-40 ug/mL
VLDL Cholesterol		Sex	Age	Reference Range
		ALL	0	
		ALL	18	<30 mg/dL

DM Methodist West Reference Range and Units of Measure Changes

Current Lab Test	Current Unit of Measure & Reference Range			New Unit of Measure & Reference Range starting 6/16/2026		
Anion Gap				6-14 mmol/L		
Alcohol Level	< 10 mg/dL			<11 mg/dL <i>*Interpretive note appending to results – see below</i>		
	<p>*Interpretive Note: The result of “Not Detected” will appear if alcohol level is below 11 mg/dL and the following result comment will be appended, “This assay is not able to detect alcohol levels below 11 mg/dL.”</p> <p>This test is for medical purposes only and not to be used for a legal blood alcohol limit.</p>					
ALT	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	<33 U/L	F	0	<33 U/L
	M	0	<41 U/L	F	18	10-35 U/L
				M	0	<41 U/L
				M	18	10-50 U/L
Amylase	U/L			U/L		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	1M	0-6	F	1M	0-6
	F	182D	1-17	F	182D	1-17
	F	1	6-44	F	1	6-44
	F	3	8-79	F	3	8-79
	F	17	21-110	F	17	21-110
	F	18	26-102	F	18	28-100
	M	1M	0-6	M	1M	0-6
	M	182D	1-17	M	182D	1-17
	M	1	6-44	M	1	6-44
	M	3	8-79	M	3	8-79
	M	17	21-110	M	17	21-110
	M	18	26-102	M	18	28-100
AST	Sex	Age	Reference Range	Sex	Age	Reference Range

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

	<table border="1"> <tr><td>F</td><td>0</td><td>8-50 U/L</td></tr> <tr><td>F</td><td>14</td><td>8-43 U/L</td></tr> <tr><td>M</td><td>0</td><td>8-60 U/L</td></tr> <tr><td>M</td><td>18</td><td>8-48 U/L</td></tr> </table>	F	0	8-50 U/L	F	14	8-43 U/L	M	0	8-60 U/L	M	18	8-48 U/L	<table border="1"> <tr><td>F</td><td>0</td><td>8-50 U/L</td></tr> <tr><td>F</td><td>14</td><td>8-43 U/L</td></tr> <tr><td>F</td><td>18+</td><td>10-35 U/L</td></tr> <tr><td>M</td><td>0</td><td>8-60 U/L</td></tr> <tr><td>M</td><td>14</td><td>8-48 U/L</td></tr> <tr><td>M</td><td>18+</td><td>10-50 U/L</td></tr> </table>	F	0	8-50 U/L	F	14	8-43 U/L	F	18+	10-35 U/L	M	0	8-60 U/L	M	14	8-48 U/L	M	18+	10-50 U/L																																																															
F	0	8-50 U/L																																																																																													
F	14	8-43 U/L																																																																																													
M	0	8-60 U/L																																																																																													
M	18	8-48 U/L																																																																																													
F	0	8-50 U/L																																																																																													
F	14	8-43 U/L																																																																																													
F	18+	10-35 U/L																																																																																													
M	0	8-60 U/L																																																																																													
M	14	8-48 U/L																																																																																													
M	18+	10-50 U/L																																																																																													
BUN/Creatinine Ratio		<table border="1"> <tr><td>Sex</td><td>Age</td><td>Reference Range</td></tr> <tr><td>ALL</td><td>0+</td><td>12.0-20.0</td></tr> </table>	Sex	Age	Reference Range	ALL	0+	12.0-20.0																																																																																							
Sex	Age	Reference Range																																																																																													
ALL	0+	12.0-20.0																																																																																													
BUN	<table border="1"> <tr><td>Sex</td><td>Age</td><td>Reference Range</td></tr> <tr><td>ALL</td><td>0+</td><td>6-20 mg/dL</td></tr> </table>	Sex	Age	Reference Range	ALL	0+	6-20 mg/dL	<table border="1"> <tr><td>Sex</td><td>Age</td><td>Reference Range</td></tr> <tr><td>ALL</td><td>0</td><td>6-20 mg/dL</td></tr> <tr><td>ALL</td><td>60+</td><td>8-23 mg/dL</td></tr> </table>	Sex	Age	Reference Range	ALL	0	6-20 mg/dL	ALL	60+	8-23 mg/dL																																																																														
Sex	Age	Reference Range																																																																																													
ALL	0+	6-20 mg/dL																																																																																													
Sex	Age	Reference Range																																																																																													
ALL	0	6-20 mg/dL																																																																																													
ALL	60+	8-23 mg/dL																																																																																													
Calcium	<p>mg/dL</p> <table border="1"> <tr><td>Sex</td><td>Age</td><td>Reference Range</td></tr> <tr><td>F</td><td>0</td><td>7.6-10.4 mg/dL</td></tr> <tr><td>F</td><td>10D</td><td>9.0-11.0 mg/dL</td></tr> <tr><td>F</td><td>31D</td><td>9.0-11.0 mg/dL</td></tr> <tr><td>F</td><td>2</td><td>8.8-10.8 mg/dL</td></tr> <tr><td>F</td><td>12</td><td>8.4-10.2 mg/dL</td></tr> <tr><td>F</td><td>19</td><td>8.5-10.5 mg/dL</td></tr> <tr><td></td><td></td><td></td></tr> <tr><td>M</td><td>0</td><td>7.6-10.4 mg/dL</td></tr> <tr><td>M</td><td>10D</td><td>9.0-11.0 mg/dL</td></tr> <tr><td>M</td><td>31D</td><td>9.0-11.0 mg/dL</td></tr> <tr><td>M</td><td>2</td><td>8.8-10.8 mg/dL</td></tr> <tr><td>M</td><td>12</td><td>8.4-10.2 mg/dL</td></tr> <tr><td>M</td><td>19</td><td>8.5-10.5 mg/dL</td></tr> </table>	Sex	Age	Reference Range	F	0	7.6-10.4 mg/dL	F	10D	9.0-11.0 mg/dL	F	31D	9.0-11.0 mg/dL	F	2	8.8-10.8 mg/dL	F	12	8.4-10.2 mg/dL	F	19	8.5-10.5 mg/dL				M	0	7.6-10.4 mg/dL	M	10D	9.0-11.0 mg/dL	M	31D	9.0-11.0 mg/dL	M	2	8.8-10.8 mg/dL	M	12	8.4-10.2 mg/dL	M	19	8.5-10.5 mg/dL	<p>mg/dL</p> <table border="1"> <tr><td>Sex</td><td>Age</td><td>Reference Range</td></tr> <tr><td>F</td><td>0</td><td>7.6-10.4 mg/dL</td></tr> <tr><td>F</td><td>10D</td><td>9.0-11.0 mg/dL</td></tr> <tr><td>F</td><td>31D</td><td>9.0-11.0 mg/dL</td></tr> <tr><td>F</td><td>2</td><td>8.8-10.8 mg/dL</td></tr> <tr><td>F</td><td>12</td><td>8.4-10.2 mg/dL</td></tr> <tr><td>F</td><td>18</td><td>8.6-10.0 mg/dL</td></tr> <tr><td>F</td><td>60</td><td>8.8-10.2 mg/dL</td></tr> <tr><td>F</td><td>90</td><td>8.2-9.6 mg/dL</td></tr> <tr><td>M</td><td>0</td><td>7.6-10.4 mg/dL</td></tr> <tr><td>M</td><td>10D</td><td>9.0-11.0 mg/dL</td></tr> <tr><td>M</td><td>31D</td><td>9.0-11.0 mg/dL</td></tr> <tr><td>M</td><td>2</td><td>8.8-10.8 mg/dL</td></tr> <tr><td>M</td><td>12</td><td>8.4-10.2 mg/dL</td></tr> <tr><td>M</td><td>18</td><td>8.6-10.0 mg/dL</td></tr> <tr><td>M</td><td>60</td><td>8.8-10.2 mg/dL</td></tr> <tr><td>M</td><td>90</td><td>8.2-9.6 mg/dL</td></tr> </table>	Sex	Age	Reference Range	F	0	7.6-10.4 mg/dL	F	10D	9.0-11.0 mg/dL	F	31D	9.0-11.0 mg/dL	F	2	8.8-10.8 mg/dL	F	12	8.4-10.2 mg/dL	F	18	8.6-10.0 mg/dL	F	60	8.8-10.2 mg/dL	F	90	8.2-9.6 mg/dL	M	0	7.6-10.4 mg/dL	M	10D	9.0-11.0 mg/dL	M	31D	9.0-11.0 mg/dL	M	2	8.8-10.8 mg/dL	M	12	8.4-10.2 mg/dL	M	18	8.6-10.0 mg/dL	M	60	8.8-10.2 mg/dL	M	90	8.2-9.6 mg/dL
Sex	Age	Reference Range																																																																																													
F	0	7.6-10.4 mg/dL																																																																																													
F	10D	9.0-11.0 mg/dL																																																																																													
F	31D	9.0-11.0 mg/dL																																																																																													
F	2	8.8-10.8 mg/dL																																																																																													
F	12	8.4-10.2 mg/dL																																																																																													
F	19	8.5-10.5 mg/dL																																																																																													
M	0	7.6-10.4 mg/dL																																																																																													
M	10D	9.0-11.0 mg/dL																																																																																													
M	31D	9.0-11.0 mg/dL																																																																																													
M	2	8.8-10.8 mg/dL																																																																																													
M	12	8.4-10.2 mg/dL																																																																																													
M	19	8.5-10.5 mg/dL																																																																																													
Sex	Age	Reference Range																																																																																													
F	0	7.6-10.4 mg/dL																																																																																													
F	10D	9.0-11.0 mg/dL																																																																																													
F	31D	9.0-11.0 mg/dL																																																																																													
F	2	8.8-10.8 mg/dL																																																																																													
F	12	8.4-10.2 mg/dL																																																																																													
F	18	8.6-10.0 mg/dL																																																																																													
F	60	8.8-10.2 mg/dL																																																																																													
F	90	8.2-9.6 mg/dL																																																																																													
M	0	7.6-10.4 mg/dL																																																																																													
M	10D	9.0-11.0 mg/dL																																																																																													
M	31D	9.0-11.0 mg/dL																																																																																													
M	2	8.8-10.8 mg/dL																																																																																													
M	12	8.4-10.2 mg/dL																																																																																													
M	18	8.6-10.0 mg/dL																																																																																													
M	60	8.8-10.2 mg/dL																																																																																													
M	90	8.2-9.6 mg/dL																																																																																													
Creatinine Clearance Rate		<table border="1"> <tr><td>Sex</td><td>Age</td><td>Reference Range</td></tr> <tr><td>ALL</td><td>18+</td><td>66-143 mL/min</td></tr> </table>	Sex	Age	Reference Range	ALL	18+	66-143 mL/min																																																																																							
Sex	Age	Reference Range																																																																																													
ALL	18+	66-143 mL/min																																																																																													
Cholesterol/HDL Ratio		<table border="1"> <tr><td>Sex</td><td>Age</td><td>Reference Range</td></tr> <tr><td>ALL</td><td>18+</td><td><4.5</td></tr> </table>	Sex	Age	Reference Range	ALL	18+	<4.5																																																																																							
Sex	Age	Reference Range																																																																																													
ALL	18+	<4.5																																																																																													
Cholesterol	<table border="1"> <tr><td>Sex</td><td>Age</td><td>Reference Range</td></tr> <tr><td>ALL</td><td>18+</td><td>0-200 mg/dL</td></tr> </table>	Sex	Age	Reference Range	ALL	18+	0-200 mg/dL	<table border="1"> <tr><td>Sex</td><td>Age</td><td>Reference Range</td></tr> <tr><td>ALL</td><td>18+</td><td><200 mg/dL</td></tr> </table>	Sex	Age	Reference Range	ALL	18+	<200 mg/dL																																																																																	
Sex	Age	Reference Range																																																																																													
ALL	18+	0-200 mg/dL																																																																																													
Sex	Age	Reference Range																																																																																													
ALL	18+	<200 mg/dL																																																																																													

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

CK, Total	Sex	Age	Reference Range	Sex	Age	Reference Range	
	ALL	0		ALL	0		
	ALL	3M	26-192 mg/dL	F	3M	26-192 mg/dL	
				F	18	26-192 mg/dL	
				M	18	39-308 mg/dL	
Creatinine	Sex	Age	Reference Range	Sex	Age	Reference Range	
	F	1	0.1-0.4 mg/dL	F	0		
	F	4	0.2-0.5 mg/dL	F	1	0.1-0.4 mg/dL	
	F	6	0.3-0.6 mg/dL	F	4	0.2-0.5 mg/dL	
	F	9	0.4-0.7 mg/dL	F	6	0.3-0.6 mg/dL	
	F	16	0.6-1.1 mg/dL	F	9	0.4-0.7 mg/dL	
				F	16	0.6-1.1 mg/dL	
				F	18+	0.51-0.95 mg/dL	
	M	1	0.1-0.4 mg/dL	M	0		
	M	3	0.1-0.5 mg/dL	M	1	0.1-0.4 mg/dL	
	M	5	0.2-0.6 mg/dL	M	3	0.1-0.5 mg/dL	
	M	10	0.3-0.7 mg/dL	M	5	0.2-0.6 mg/dL	
	M	12	0.4-0.8 mg/dL	M	10	0.3-0.7 mg/dL	
	M	14	0.5-0.9 mg/dL	M	12	0.4-0.8 mg/dL	
	M	16	0.8-1.3 mg/dL	M	14	0.5-0.9 mg/dL	
				M	16	0.8-1.3 mg/dL	
				M	18+	0.67-1.17 mg/dL	
	C-Reactive Protein (CRP)	Sex	Age	Reference Range	Sex	Age	Reference Range
		ALL	0	0.0-0.5 mg/dL	ALL	0	0-5 mg/L
Bilirubin, Direct	Sex	Age	Reference Range	Sex	Age	Reference Range	
	ALL	0	0.0-0.3 mg/dL	F	0	0.0-0.3 mg/dL	
				F	18	0.0-0.2 mg/dL	
				M	0	0.0-0.3 mg/dL	
			M	18	0.0-0.2 mg/dL		
*Note: Indirect Bilirubin calculation will be added to all UPH Standardized Chemistry panels that include Total Bilirubin and Indirect Bilirubin for all UPH markets.							
Gentamicin Peak				6-10 µg/mL			
Gentamicin Trough				0.5-2.0 µg/mL			
Glucose	Sex	Age	Reference Range	Sex	Age	Reference Range	
	ALL	0	45-100 mg/dL	ALL	0	45-100 mg/dL	

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

	ALL	1D	45-90 mg/dL		ALL	1D	45-90 mg/dL
	ALL	2D	60-90 mg/dL		ALL	2D	60-90 mg/dL
	ALL	3D	70-99 mg/dL		ALL	3D	70-99 mg/dL
	ALL	1M	70-99 mg/dL		ALL	1M	70-99 mg/dL
	ALL	18	70-99 mg/dL		ALL	18+	70-180 mg/dL
Glucose, Fasting	Sex	Age	Reference Range		Sex	Age	Reference Range
	ALL	0	45-100 mg/dL		ALL	0	45-100 mg/dL
	ALL	1D	45-90 mg/dL		ALL	1D	45-90 mg/dL
	ALL	2D	60-90 mg/dL		ALL	2D	60-90 mg/dL
	ALL	3D	70-99 mg/dL		ALL	3D	70-99 mg/dL
	ALL	31D	70-99 mg/dL		ALL	31D	70-99 mg/dL
	ALL	18+	70-100 mg/dL		ALL	18+	70-100 mg/dL
Indirect Bilirubin					Sex	Age	Reference Range
					ALL	0	
					ALL	18	0-0.9 mg/dL
Potassium	Sex	Age	Reference Range		Sex	Age	Reference Range
	ALL	0	3.5-6.0 mmol/L		ALL	0	3.5-6.0 mmol/L
	ALL	6M	3.5-6.0 mmol/L		ALL	6M	3.5-6.0 mmol/L
	ALL	10	3.5-5.1 mmol/L		ALL	10	3.5-5.1 mmol/L
					ALL	18	3.4-5.1 mmol/L
LDH	Sex	Age	Reference Range		Sex	Age	Reference Range
	ALL	0	135-750 U/L		F	0	135-750 U/L
	ALL	31D	180-435 U/L		F	31D	180-435 U/L
	ALL	1	160-370 U/L		F	1	160-370 U/L
	ALL	4	145-345 U/L		F	4	145-345 U/L
	ALL	7	143-290 U/L		F	7	143-290 U/L
	ALL	10	120-293 U/L		F	10	120-293 U/L
	ALL	13	110-283 U/L		F	13	110-283 U/L
	ALL	16	105-233 U/L		F	16	105-233 U/L
	ALL	18	122-222 U/L		F	18	135-214 U/L
					M	0	135-750 U/L
					M	31D	180-435 U/L
					M	1	160-370 U/L
					M	4	145-345 U/L
				M	7	143-290 U/L	

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

				M	10	120-293 U/L
				M	13	110-283 U/L
				M	16	105-233 U/L
				M	18	135-225 U/L
Magnesium	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0	1.6-2.6 mg/dL	ALL	0	1.6-2.6 mg/dL
				ALL	12	1.7-2.2 mg/dL
				ALL	20	1.6-2.6 mg/dL
				ALL	60	1.6-2.4 mg/dL
				ALL	90	1.7-2.3 mg/dL
Pro-BNP	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0	263-6500 pg/mL	ALL	0	263-6500 pg/mL
	ALL	1M	37-1000 pg/mL	ALL	1M	37-1000 pg/mL
	ALL	1	39-675 pg/mL	ALL	1	39-675 pg/mL
	ALL	3	23-327 pg/mL	ALL	3	23-327 pg/mL
	ALL	7	10-242 pg/mL	ALL	7	10-242 pg/mL
	ALL	15	6-207 pg/mL	ALL	15	6-207 pg/mL
	ALL	18	<300 pg/mL	ALL	18	0-300 pg/mL
Procalcitonin	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0	<2.00 ng/mL	ALL	0	<2.00 ng/mL
	ALL	1D	<20.00 ng/mL	ALL	1D	<20.00 ng/mL
	ALL	3D	<0.10 ng/mL	ALL	3D	<0.10 ng/mL
				ALL	18	0-0.1 ng/mL
Rasuri Uric Acid	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	2.1-8.4 mg/dL	F	0	2.1-8.4 mg/dL
	F	1	1.9-5.4 mg/dL	F	1	1.9-5.4 mg/dL
	F	10	3.5-7.3 mg/dL	F	10	3.5-7.3 mg/dL
	F	19	3.2-7.1 mg/dL	F	18	2.4-5.7 mg/dL
	M	0	2.1-8.4 mg/dL	M	0	2.1-8.4 mg/dL
	M	1	1.9-5.4 mg/dL	M	1	1.9-5.4 mg/dL
	M	10	3.5-7.3 mg/dL	M	10	3.5-7.3 mg/dL
	M	19	3.8-8.2 mg/dL	M	18	3.4-7.0 mg/dL
Glucose, CSF				Sex	Age	Reference Range
				ALL	18	40-70 mg/dL
Bilirubin Total	Sex	Age	Reference Range	Sex	Age	Reference Range

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

	ALL	0	0.0-5.0 mg/dL		ALL	0	0.0-5.0 mg/dL
	ALL	1D	0.0-6.8 mg/dL		ALL	1D	0.0-6.8 mg/dL
	ALL	3D	0.0-5.9 mg/dL		ALL	3D	0.0-5.9 mg/dL
	ALL	7D	0.0-1.3 mg/dL		ALL	7D	0.0-1.3 mg/dL
	ALL	1M	0.0-1.0 mg/dL		ALL	1M	0.0-1.0 mg/dL
	ALL	18	0.4-1.3 mg/dL		ALL	18	<1.2 mg/dL
Chloride, 24 HR Urine	Sex	Age	Reference Range		Sex	Age	Reference Range
	ALL	0	50-250 mmol/(24.h)		ALL	0	50-250 mmol/(24.h)
					ALL	18	110-250 mmol/(24.h)
Creatinine, 24H Urine	Sex	Age	Reference Range		Sex	Age	Reference Range
	F	0	800-1800 mg/(24.h)		F	0	800-1800 mg/(24.h)
	F	40	670-1350 mg/(24.h)		F	18	720-1510 mg/(24.h)
	F	50	640-1260 mg/(24.h)		M	0	1000-2000 mg/(24.h)
	F	60	600-1140 mg/(24.h)		M	18	980-2200 mg/(24.h)
	F	70	540-1020 mg/(24.h)				
	F	80	460-810 mg/(24.h)				
	F	0	800-1800 mg/(24.h)				
	M	0	1000-2000				
	M	40	770-1560				
	M	50	740-1450				
	M	60	690-1320				
	M	70	620-1180				
	M	80	530-930				
Protein, 24H Urine	0-150 mg/dL				<150 mg/dL		
Vancomycin Peak	25-50 ug/mL				Sex	Age	Reference Range
					ALL	0	25-50 ug/mL
					ALL	18	20-40 ug/mL
VLDL Cholesterol					Sex	Age	Reference Range
					ALL	0	
					ALL	18	<30 mg/dL

DM Methodist Reference Range and Units of Measure Changes

Current Lab Test	Current Unit of Measure & Reference Range	New Unit of Measure & Reference Range starting 6/16/2026
Anion Gap	8-20 mmol/L	6-14 mmol/L

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

Alcohol Level	< 10 mg/dL			<11 mg/dL <i>*Interpretive note appending to results – see below</i>		
	<p>*Interpretive Note: The result of “Not Detected” will appear if alcohol level is below 11 mg/dL and the following result comment will be appended, “This assay is not able to detect alcohol levels below 11 mg/dL.”</p> <p>This test is for medical purposes only and not to be used for a legal blood alcohol limit.</p>					
ALT	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	<33 U/L	F	0	<33 U/L
	M	0	<41 U/L	F	18	10-35 U/L
				M	0	<41 U/L
				M	18	10-50 U/L
Amylase	U/L			U/L		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	1M	0-6	F	1M	0-6
	F	182D	1-17	F	182D	1-17
	F	1	6-44	F	1	6-44
	F	3	8-79	F	3	8-79
	F	17	21-110	F	17	21-110
	F	18	26-102	F	18	28-100
	M	1M	0-6	M	1M	0-6
	M	182D	1-17	M	182D	1-17
	M	1	6-44	M	1	6-44
	M	3	8-79	M	3	8-79
	M	17	21-110	M	17	21-110
	M	18	26-102	M	18	28-100
AST	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	8-50 U/L	F	0	8-50 U/L
	F	14	8-43 U/L	F	14	8-43 U/L
	M	0	8-60 U/L	F	18+	10-35 U/L
	M	18	8-48 U/L	M	0	8-60 U/L
				M	14	8-48 U/L
			M	18+	10-50 U/L	
Beta hydroxybutyrate	0.1-0.4 mmol/L			0.1- 0.2 mmol/L		
Calcium	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	7.6-10.4 mg/dL	F	0	7.6-10.4 mg/dL
	F	10D	9.0-11.0 mg/dL	F	10D	9.0-11.0 mg/dL

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

	F	31D	9.0-11.0 mg/dL	F	31D	9.0-11.0 mg/dL
	F	2	8.8-10.8 mg/dL	F	2	8.8-10.8 mg/dL
	F	12	8.4-10.2 mg/dL	F	12	8.4-10.2 mg/dL
	F	19	8.5-10.5 mg/dL	F	18	8.6-10.0 mg/dL
	M	0	7.6-10.4 mg/dL	F	60	8.8-10.2 mg/dL
	M	10D	9.0-11.0 mg/dL	F	90	8.2-9.6 mg/dL
	M	31D	9.0-11.0 mg/dL	M	0	7.6-10.4 mg/dL
	M	2	8.8-10.8 mg/dL	M	10D	9.0-11.0 mg/dL
	M	12	8.4-10.2 mg/dL	M	31D	9.0-11.0 mg/dL
	M	19	8.5-10.5 mg/dL	M	2	8.8-10.8 mg/dL
				M	12	8.6-10 mg/dL
				M	18	8.6-10.0 mg/dL
				M	60	8.8-10.2 mg/dL
				M	90	8.2-9.6 mg/dL
CKMB	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	ALL	<3.8 ng/mL	F	ALL	<5.3 ng/mL
	M	ALL	<6.7 ng/mL	M	ALL	<10.0 ng/mL
Creatinine	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	1	0.1-0.4 mg/dL	F	0	
	F	4	0.2-0.5 mg/dL	F	1	0.1-0.4 mg/dL
	F	6	0.3-0.6 mg/dL	F	4	0.2-0.5 mg/dL
	F	9	0.4-0.7 mg/dL	F	6	0.3-0.6 mg/dL
	F	16	0.6-1.1 mg/dL	F	9	0.4-0.7 mg/dL
				F	16	0.6-1.1 mg/dL
				F	18+	0.51-0.95
	M	1	0.1-0.4 mg/dL	M	0	
	M	3	0.1-0.5 mg/dL	M	1	0.1-0.4 mg/dL
	M	5	0.2-0.6 mg/dL	M	3	0.1-0.5 mg/dL
	M	10	0.3-0.7 mg/dL	M	5	0.2-0.6 mg/dL
	M	12	0.4-0.8 mg/dL	M	10	0.3-0.7 mg/dL
	M	14	0.5-0.9 mg/dL	M	12	0.4-0.8 mg/dL
	M	16	0.8-1.3 mg/dL	M	14	0.5-0.9 mg/dL
				M	16	0.8-1.3 mg/dL
				M	18+	0.67-1.17 mg/dL

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

C-Reactive Protein (CRP)	Sex	Age	Reference Range &	Sex	Age	Reference Range
	ALL	0	0.0-0.5 mg/dL	ALL	18+	0-5 mg/L
CRP, Body Fluid	mg/dL			mg/L		
Bilirubin, Direct	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0	0.0-0.3 mg/dL	F	0	0.0-0.3 mg/dL
				F	18	0.0-0.2 mg/dL
				M	0	0.0-0.3 mg/dL
				M	18	0.0-0.2 mg/dL
*Note: Indirect Bilirubin calculation will be added to all UPH Standardized Chemistry panels that include Total Bilirubin and Indirect Bilirubin for all UPH markets.						
Iron	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	110-270 ug/dL	F	0	110-270 ug/dL
	F	5M	30-70 ug/dL	F	5M	30-70 ug/dL
	F	2	20-124 ug/dL	F	2	20-124 ug/dL
	F	3	53-119 ug/dL	F	3	53-119 ug/dL
	F	12	37-145 ug/dL	F	12	37-145 ug/dL
				F	18+	37-145 ug/dL
	M	0	110-270 ug/dL	M	0	110-270 ug/dL
	M	5M	30-70 ug/dL	M	5M	30-70 ug/dL
	M	2	20-124 ug/dL	M	2	20-124 ug/dL
	M	3	53-119 ug/dL	M	3	53-119 ug/dL
	M	12	59-158 ug/dL	M	12	59-158 ug/dL
				M	18+	61-157 ug/dL
Iron Saturation	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0	20-50%	ALL	0	14-50%
Gentamicin	None			None Comment: Generally accepted for therapeutic effectiveness: Rang: Unit: Peak 6.0-10.0 ug/mL Trough 0.5-2.0 ug/mL		
Gentamicin Peak	5-10 µg/mL			6-10 µg/mL		
Gentamicin Trough	<2 ug/mL			0.5-2.0 µg/mL		
Human Growth Hormone	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	<7.79 ng/mL	F	0	<7.79 ng/mL
	F	11	<8.05 ng/mL	F	11	<8.05 ng/mL
	F	18	<9.88 ng/mL	F	18	0.13-9.88 ng/mL

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

	M	0	<6.29 ng/mL	M	0	<6.29 ng/mL
	M	11	<10.8 ng/mL	M	11	<10.8 ng/mL
	M	18	<2.47 ng/mL	M	18	0.01-2.47 ng/mL
Glucose	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0	45-100 mg/dL	ALL	0	45-100 mg/dL
	ALL	1D	45-90 mg/dL	ALL	1D	45-90 mg/dL
	ALL	2D	60-90 mg/dL	ALL	2D	60-90 mg/dL
	ALL	3D	70-99 mg/dL	ALL	3D	70-99 mg/dL
	ALL	1M	70-99 mg/dL	ALL	1M	70-99 mg/dL
	ALL	18	70-99 mg/dL	ALL	18+	70-180 mg/dL
Glucose, Fasting	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0	45-100 mg/dL	ALL	0	45-100 mg/dL
	ALL	1D	45-90 mg/dL	ALL	1D	45-90 mg/dL
	ALL	2D	60-90 mg/dL	ALL	2D	60-90 mg/dL
	ALL	3D	70-99 mg/dL	ALL	3D	70-99 mg/dL
	ALL	31D	70-99 mg/dL	ALL	31D	70-99 mg/dL
	ALL	18+	70-100 mg/dL	ALL	18+	70-100 mg/dL
Indirect Bilirubin	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0		ALL	0	
	ALL	18	0-0.9 mg/dL	ALL	18	0-0.9 mg/dL
Potassium	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0	3.5-6.0 mmol/L	ALL	0	3.5-6.0 mmol/L
	ALL	6M	3.5-6.0 mmol/L	ALL	6M	3.5-6.0 mmol/L
	ALL	10	3.5-5.1 mmol/L	ALL	10	3.5-5.1 mmol/L
	ALL	18	3.4-5.1 mmol/L	ALL	18	3.4-5.1 mmol/L
Lactic Acid	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0	0.5-2 mmol/L			
	ALL	18	0.5-2 mmol/L	ALL	18+	0.5-2.2 mmol/L
LDH	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0	135-750 U/L	F	0	135-750 U/L
	ALL	31D	180-435 U/L	F	31D	180-435 U/L
	ALL	1	160-370 U/L	F	1	160-370 U/L
	ALL	4	145-345 U/L	F	4	145-345 U/L
	ALL	7	143-290 U/L	F	7	143-290 U/L
	ALL	10	120-293 U/L	F	10	120-293 U/L

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

	ALL	13	110-283 U/L	F	13	110-283 U/L
	ALL	16	105-233 U/L	F	16	105-233 U/L
	ALL	18	122-222 U/L	F	18	135-214 U/L
				M	0	135-750 U/L
				M	31D	180-435 U/L
				M	1	160-370 U/L
				M	4	145-345 U/L
				M	7	143-290 U/L
				M	10	120-293 U/L
				M	13	110-283 U/L
				M	16	105-233 U/L
				M	18	135-225 U/L
	Magnesium	Sex	Age	Reference Range	Sex	Age
ALL		0	1.5-2.2 mg/dL	ALL	0	1.6-2.6 mg/dL
ALL		12	1.7-2.1 mg/dL	ALL	12	1.7-2.2 mg/dL
ALL		20		ALL	20	1.6-2.6 mg/dL
ALL		60	1.6-2.4 mg/dL	ALL	60	1.6-2.4 mg/dL
ALL		90	1.7-2.3 mg/dL	ALL	90	1.7-2.3 mg/dL
Pro-BNP	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0	263-6500 pg/mL	ALL	0	263-6500 pg/mL
	ALL	1M	37-1000 pg/mL	ALL	1M	37-1000 pg/mL
	ALL	1	39-675 pg/mL	ALL	1	39-675 pg/mL
	ALL	3	23-327 pg/mL	ALL	3	23-327 pg/mL
	ALL	7	10-242 pg/mL	ALL	7	10-242 pg/mL
	ALL	15	6-207 pg/mL	ALL	15	6-207 pg/mL
	ALL	18	<300 pg/mL	ALL	18	0-300 pg/mL
Procalcitonin	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0	<2.00 ng/mL	ALL	0	<2.00 ng/mL
	ALL	1D	<20.00 ng/mL	ALL	1D	<20.00 ng/mL
	ALL	3D	<0.10 ng/mL	ALL	3D	<0.10 ng/mL
				ALL	18	0-0.1 ng/mL
<p>Interpretive Comment: <10-0.25: Low probability of bacterial infection Antibiotic therapy generally not indicated unless clinical context warrants use. 0.26-0.50: Increased probability of bacterial infection</p>						

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

		<p>Antibiotics therapy may be considered based on clinical evaluation</p> <p>>50: Higher probability of bacterial infection</p> <p>Antibiotic therapy encouraged with consideration for false positive results</p> <p>False positives can be seen in patients with a variety of illnesses, including but not limited to severe trauma, shock, recent surgery, burns, renal insufficiency, severe liver disease, COVID-19, and certain malignancies.</p>				
PTH Intact	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0	15-65 pg/mL	ALL	0	17.9-58.6 pg/mL
Rasuri Uric Acid	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	2.1-8.4 mg/dL	F	0	2.1-8.4 mg/dL
	F	1	1.9-5.4 mg/dL	F	1	1.9-5.4 mg/dL
	F	10	3.5-7.3 mg/dL	F	10	3.5-7.3 mg/dL
	F	19	3.2-7.1 mg/dL	F	18	2.4-5.7 mg/dL
	M	0	2.1-8.4 mg/dL	M	0	2.1-8.4 mg/dL
	M	1	1.9-5.4 mg/dL	M	1	1.9-5.4 mg/dL
	M	10	3.5-7.3 mg/dL	M	10	3.5-7.3 mg/dL
	M	19	3.8-8.2 mg/dL	M	18	3.4-7.0 mg/dL
	Bilirubin Total	Sex	Age	Reference Range	Sex	Age
ALL		0	0.0-5.0 mg/dL	ALL	0	0.0-5.0 mg/dL
ALL		1D	0.0-6.8 mg/dL	ALL	1D	0.0-6.8 mg/dL
ALL		3D	0.0-5.9 mg/dL	ALL	3D	0.0-5.9 mg/dL
ALL		7D	0.0-1.3 mg/dL	ALL	7D	0.0-1.3 mg/dL
ALL		1M	0.0-1.0 mg/dL	ALL	1M	0.0-1.0 mg/dL
ALL		18	0.4-1.3 mg/dL	ALL	18	<1.3 mg/dL
Total Iron Binding Capacity (TIBC)		Sex	Age	Reference Range	Sex	Age
	ALL	0	255-479 ug/dL	ALL	0	250-400 ug/dL
Chloride, 24 HR Urine	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0	50-250 mmol/(24.h)	ALL	0	110-250 mmol/(24.h)
Uric Acid	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	2.1-8.4 mg/dL	F	0	2.1-8.4 mg/dL
	F	1	1.9-5.4 mg/dL	F	1	1.9-5.4 mg/dL
	F	10	3.5-7.3 mg/dL	F	10	3.5-7.3 mg/dL
	F	19	3.2-7.1 mg/dL	F	18	2.4-5.7 mg/dL
	M	0	2.1-8.4 mg/dL	M	0	2.1-8.4 mg/dL
	M	1	1.9-5.4 mg/dL	M	1	1.9-5.4 mg/dL

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

	M	10	3.5-7.3 mg/dL	M	10	3.5-7.3 mg/dL
	M	19	3.8-8.2 mg/dL	M	18	3.4-7.0 mg/dL
Urea Nitrogen, 24H	10-35 g/(24.h)			12-20 g/(24.h)		
Vancomycin Peak	25-50 ug/mL			Sex	Age	Reference Range
				ALL	0	20-40 ug/mL
Acetaminophen				Therapeutic Range: 10.0-30.0 ug/mL Toxic Level: >100.0 ug/mL		
BUN/Creatinine Ratio				Sex	Age	Reference Range
				ALL	18+	12-20
BUN	Sex	Age	Reference Range	Sex	Age	Reference Range
	ALL	0+	6-20 mg/dL	ALL	0	6-20 mg/dL
				ALL	60+	8-23 mg/dL
Creatinine Clearance Rate				Sex	Age	Reference Range
				ALL	18+	66-143 mL/min
Cholesterol/HDL Ratio				Sex	Age	Reference Range
				ALL	18+	<4.5
Creatinine, 24H Urine	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	800-1800 mg/(24.h)	F	0	800-1800 mg/(24.h)
	F	40	670-1350 mg/(24.h)	F	18	720-1510 mg/(24.h)
	F	50	640-1260 mg/(24.h)	F	40	670-1350 mg/(24.h)
	F	60	600-1140 mg/(24.h)	F	50	640-1260 mg/(24.h)
	F	70	540-1020 mg/(24.h)	F	60	600-1140 mg/(24.h)
	F	80	460-810 mg/(24.h)	F	70	540-1020 mg/(24.h)
	F	0	800-1800 mg/(24.h)	F	80	460-810 mg/(24.h)
	M	0	1000-2000 mg/(24.h)	M	0	1000-2000 mg/(24.h)
	M	40	770-1560 mg/(24.h)	M	18	980-2200 mg/(24.h)
	M	50	740-1450 mg/(24.h)	M	40	770-1560 mg/(24.h)
	M	60	690-1320 mg/(24.h)	M	50	740-1450 mg/(24.h)
	M	70	620-1180 mg/(24.h)	M	60	690-1320 mg/(24.h)
	M	80	530-930 mg/(24.h)	M	70	620-1180 mg/(24.h)
				M	80	530-930 mg/(24.h)
VLDL Cholesterol				Sex	Age	Reference Range
				ALL	0	<30 mg/dL

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

Pathology Laboratory Units of Measure & Reference Range Changes

Current Lab Test	Current Unit of Measure & Reference Range			New Unit of Measure & Reference Range starting 6/16/2026		
Angiotensin Convert Enzyme	U/L			U/L		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	20	10-50	F	18	8-52
	M	20	10-50	M	18	8-52
Anion Gap	mmol/L			mmol/L		
	Sex	Age	Reference Range	Sex	Age	Reference Range
				F	0	
				F	18	6-14
				M	0	
			M	18	6-14	
Albumin	g/dL			g/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	2.8-4.4	F	0	2.8-4.4
	F	5D	3.8-5.4	F	5D	3.8-5.4
	F	15	3.2-4.5	F	15	3.2-4.5
	F	19	3.5-5.2	F	18	3.5-5.2
	M	0	2.8-4.4	M	0	2.8-4.4
	M	5D	3.8-5.4	M	5D	3.8-5.4
	M	15	3.2-4.5	M	15	3.2-4.5
	M	19	3.5-5.2	M	18	3.5-5.2
Urine Albumin/Creatinine Urine Ratio	mg/g[creat]			mg/g[creat]		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	<25	F	0	<25
				F	18	<30
	M	0	<17	M	0	<17
			M	18	<30	
Albumin Excretion Rate	mg/24HR			mg/24HR		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	0-20	F	0	0-20
				F	18	
	M	0	0-20	M	0	0-20
			M	18		
Albumin Urine	mg/dL			mg/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	0.0-1.9	F	0	0.0-1.9
				F	18	0.0-2.0
	M	0	0.0-1.9	M	0	0.0-1.9
			M	18	0.0-2.0	
Albumin Rate	ug/min			ug/min		

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	0-30	F	0	0-30
				F	18	
	M	0	0-30	M	0	0-30
				M	18	
Ethanol Level	<10 mg/dL			Not Detected <i>*See Interpretive Note appending to results below</i>		
	*Interpretive Note: The result of "Not Detected" will appear if alcohol level is below 11 mg/dL and the following result comment will be appended, "This assay is not able to detect alcohol levels below 11 mg/dL." This test is for medical purposes only and not to be used for a legal blood alcohol limit.					
Alkaline Phosphatase	U/L			U/L		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	83-248	F	0	83-248
	F	15D	122-469	F	15D	122-469
	F	1	142-335	F	1	142-335
	F	10	129-417	F	10	129-417
	F	13	57-254	F	13	57-254
	F	15	50-117	F	15	50-117
	F	17	45-87	F	17	45-87
	F	19	35-104	F	18	35-104
	M	0	83-248	M	0	83-248
	M	15D	122-469	M	15D	122-469
	M	1	142-335	M	1	142-335
	M	10	129-417	M	10	129-417
	M	13	116-468	M	13	116-468
	M	15	82-331	M	15	82-331
	M	17	55-149	M	17	55-149
	M	19	40-129	M	18	40-129
Amylase	U/L			U/L		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	1M	0-6	F	1M	0-6
	F	182D	1-17	F	182D	1-17
	F	1	6-44	F	1	6-44
	F	3	8-79	F	3	8-79
	F	17	21-110	F	17	21-110
	F	18	26-102	F	18	28-100
	M	1M	0-6	M	1M	0-6
	M	182D	1-17	M	182D	1-17
	M	1	6-44	M	1	6-44
	M	3	8-79	M	3	8-79
	M	17	21-110	M	17	21-110
	M	18	26-102	M	18	28-100
AST	U/L			U/L		

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	8-50	F	0	8-50
	F	14	8-43	F	18	<32
	M	0	8-60	M	0	8-60
	M	14	8-48	M	18	<40
BUN/Creatinine Ratio						
	Sex	Age	Reference Range	Sex	Age	Reference Range
				F	0	
				F	18	12-20
				M	0	
				M	18	12-20
BUN	mg/dL			mg/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	6-20	F	0	6-20
				F	61	8-23
	M	0	6-20	M	0	6-20
				M	61	8-23
Calcium	mg/dL			mg/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	7.6-10.4	F	0	7.6-10.4
	F	10D	9.0-11.0	F	10D	9.0-11.0
	F	31D	9.0-11.0	F	31D	9.0-11.0
	F	2	8.8-10.8	F	2	8.8-10.8
	F	12	8.4-10.2	F	12	8.4-10.2
	F	19	8.5-10.5	F	18	8.6-10.0
				F	61	8.8-10.2
				F	91	8.2-9.6
	M	0	7.6-10.4	M	0	7.6-10.4
	M	10D	9.0-11.0	M	10D	9.0-11.0
	M	31D	9.0-11.0	M	31D	9.0-11.0
	M	2	8.8-10.8	M	2	8.8-10.8
	M	12	8.4-10.2	M	12	8.4-10.2
	M	19	8.5-10.5	M	18	8.6-10.0
				M	61	8.8-10.2
				M	91	8.2-9.6
CA 125	U/mL			U/mL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	0-34	F	0	0-34
				F	18	0-38
	M	0	0-34	M	0	0-34
				M	18	0-38
Carbamazepine Level	ug/mL			ug/mL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	8-12	F	0	8-12

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

				F	18	4-12
	M	0	8-12	M	0	8-12
				M	18	4-12
CEA	ng/mL			ng/mL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	0.0-3.8	F	0	0-3.8
				F	18	0-4.7
	M	0	0.0-3.8	M	0	0-3.8
				M	18	0-4.7
Cholesterol	mg/dL			mg/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	18	0-200	F	18	<200
	M	18	0-200	M	18	<200
Cholesterol/HDL Ratio						
	Sex	Age	Reference Range	Sex	Age	Reference Range
				F	0	
				F	18	<4.5
				M	0	
				M	18	<4.5
CKMB	ng/mL			ng/mL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	0.0-3.8	F	0	0.00-3.80
				F	18	0.00-5.34
	M	0	0.0-6.7	M	0	0.00-6.70
				M	18	0.00-10.4
Creatinine	mg/dL			mg/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
				F	0	
	F	1	0.1-0.4	F	1	0.1-0.4
	F	4	0.2-0.5	F	4	0.2-0.5
	F	6	0.3-0.6	F	6	0.3-0.6
	F	9	0.4-0.7	F	9	0.4-0.7
	F	16	0.6-1.1	F	18	0.51-0.95
				M	0	
	M	1	0.1-0.4	M	1	0.1-0.4
	M	3	0.1-0.5	M	3	0.1-0.5
	M	5	0.2-0.6	M	5	0.2-0.6
	M	10	0.3-0.7	M	10	0.3-0.7
	M	12	0.4-0.8	M	12	0.4-0.8
	M	14	0.5-0.9	M	14	0.5-0.9
	M	16	0.8-1.3	M	18	0.67-1.17
CRP	mg/dL			mg/L		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	0.0-0.5	F	0	<5.0

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

	M	0	0.0-0.5	M	0	<5.0
CRP, Body Fluid	mg/dL			mg/L		
Cystatin C	mg/L			mg/L		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0		F	0	
	F	18	0.63-1.03	F	18	0.61-0.95
	F	50	0.67-1.21			
	M	0		M	0	
	M	18	0.63-1.03	M	18	0.61-0.95
	M	50	0.67-1.21			
Bilirubin, Direct	mg/dL			mg/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	0.0-0.3	F	0	0.0-0.3
				F	18	0.0-0.2
	M	0	0.0-0.3	M	0	0.0-0.3
			M	18	0.0-0.2	
DHEA Sulfate	ug/dL			ug/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	18	44-332	F	15	65.1-368
	F	30	31-228	F	20	148-407
	F	40	18-244	F	25	98.8-340
	F	50	<200	F	35	60.9-337
	F	60	<157	F	45	35.4-256
				F	55	18.9-205
				F	65	9.40-246
				F	75	12.0-154
	M	18	89-457	M	15	70.2-492
	M	30	65-334	M	20	211-492
	M	40	48-244	M	25	160-449
	M	50	35-179	M	35	88.9-427
	M	60	25-131	M	45	44.3-331
			M	55	51.7-295	
			M	65	33.6-249	
			M	75	16.2-123	
Estradiol Level	pg/mL			pg/mL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
				M	0	
	M	18	26-61	M	18	11.3-43.2
Ferritin	ng/mL			ng/mL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	25-200	F	0	25-200
	F	1M	200-600	F	1M	200-600
	F	2M	50-200	F	2M	50-200
	F	1	15-140	F	1	15-140

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

	F	15	13-150	F	15	13-150
				F	61	11-328
	M	0	25-200	M	0	25-200
	M	1M	200-600	M	1M	200-600
	M	2M	50-200	M	2M	50-200
	M	1	15-140	M	1	15-140
	M	15	30-400	M	15	30-400
				M	61	31-409
Iron Saturation	%			%		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	20-50	F	0	20-50
				F	18	14-50
	M	0	20-50	M	0	20-50
			M	18	14-50	
Folate	ng/mL			ng/mL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	>4.0	F	0	>4.0
				F	18	>4.5
	M	0	>4.0	M	0	>4.0
			M	18	>4.5	
FSH	m[IU]/mL			m[IU]/mL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	M	18	1.5-12.4	M	0	<3.4
				M	12M	<2.0
				M	6	<2.4
				M	11	0.6-6.9
				M	16	0.7-9.6
				M	19	1.2-15.8
				F	0	1.2-12.5
				F	12M	0.5-6.0
				F	11	0.9-8.9
				F	16	0.7-9.6
				F	19	
Gentamicin	ug/mL			ug/mL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	5-10	F	0	
	M	0	5-10	M	0	
Gentamicin Peak	ug/mL			ug/mL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	5.0-10.0	F	0	5.0-10.0
				F	18	6.0-10.0
	M	0	5.0-10.0	M	0	5.0-10.0
			M	18	6.0-10.0	
Gentamicin Trough	ug/mL			ug/mL		

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	0.0-2.0	F	0	0.0-2.0
	F	19	0.0-2.0	F	18	0.5-2.0
	M	0	0.0-2.0	M	0	0.0-2.0
	M	19	0.0-2.0	M	18	0.5-2.0
Growth Hormone	ng/mL			ng/mL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	0.12-7.79	F	0	0.12-7.79
	F	11	0.12-8.05	F	11	0.12-8.05
	F	18	0.13-9.88	F	18	0.13-9.88
	M	0	0.09-6.29	M	0	0.09-6.29
	M	11	0.08-10.80	M	11	0.08-10.80
	M	18	0.01-2.47	M	18	0.00-2.47
Growth Hormone Baseline	ng/mL			ng/mL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	18	0.13-9.88	F	18	0.13-9.88
	M	18	0.01-2.47	M	18	0.00-2.47
Glucose	mg/dL			mg/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	45-100	F	0	45-100
	F	1D	45-90	F	1D	45-90
	F	2D	60-90	F	2D	60-90
	F	3D	70-99	F	3D	70-99
	F	1M	70-99	F	1M	70-99
	F	18	70-99	F	18	70-180
	M	0	45-100	M	0	45-100
	M	1D	45-90	M	1D	45-90
	M	2D	60-90	M	2D	60-90
	M	3D	70-99	M	3D	70-99
	M	1M	70-99	M	1M	70-99
	M	18	70-99	M	18	70-180
	Glucose, Fasting	mg/dL			mg/dL	
Sex		Age	Reference Range	Sex	Age	Reference Range
F		0	45-100	F	0	45-100
F		1D	45-90	F	1D	45-90
F		2D	60-90	F	2D	60-90
F		3D	70-99	F	3D	70-99
F		31D	70-99	F	31D	70-99
				F	18	70-100
M		0	45-100	M	0	45-100
M		1D	45-90	M	1D	45-90
M		2D	60-90	M	2D	60-90
M		3D	70-99	M	3D	70-99
M		31D	70-99	M	31D	70-99

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

				M	18	70-100
Hep A IgM						
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	NR	F	0	NR
	M	0	NR	M	0	NR
Hemoglobin A1C	%			%		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	<5.7	F	0	
	M	0	<5.7	M	0	
Hep B Core IgM						
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	NR	F	0	NR
	M	0	NR	M	0	NR
Hep B Surface Ab	m[IU]/mL					
	Sex	Age	Reference Range	Sex	Age	Reference Range
				F	0	NR
				M	0	NR
Hep B Surface Ag Interp						
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	NR	F	0	NR
	M	0	NR	M	0	NR
Hep B S Ag Confirm						
	Sex	Age	Reference Range	Sex	Age	Reference Range
				F	0	NR
				M	0	NR
Hep B S Ag Qnt				m[IU]/mL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
				F	0	
				M	0	
Hep C Ab						
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	NR	F	0	NR
	M	0	NR	M	0	NR
Indirect Bilirubin				mg/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
				F	0	
				F	18	0.0-0.9
				M	0	
				M	18	0.0-0.9
Potassium	mmol/L			mmol/L		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	3.5-6.0	F	0	3.5-6.0
	F	6M	3.5-6.0	F	6M	3.5-6.0
	F	10	3.5-5.1	F	10	3.5-5.1

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

				F	18	3.4-5.1
	M	0	3.5-6.0	M	0	3.5-6.0
	M	6M	3.5-6.0	M	6M	3.5-6.0
	M	10	3.5-5.1	M	10	3.5-5.1
				M	18	3.4-5.1
LDH	U/L			U/L		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	135-750	F	0	135-750
	F	31D	180-435	F	31D	180-435
	F	1	160-370	F	1	160-370
	F	4	145-345	F	4	145-345
	F	7	143-290	F	7	143-290
	F	10	120-293	F	10	120-293
	F	13	110-283	F	13	110-283
	F	16	105-233	F	16	105-233
	F	18	122-222	F	18	135-214
	M	0	135-750	M	0	135-750
	M	31D	180-435	M	31D	180-435
	M	1	160-370	M	1	160-370
	M	4	145-345	M	4	145-345
	M	7	143-290	M	7	143-290
	M	10	120-293	M	10	120-293
	M	13	110-283	M	13	110-283
	M	16	105-233	M	16	105-233
	M	18	122-222	M	18	135-225
Levetiracetam (Keppra) Level	ug/mL			ug/mL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	12.0-46.0	F	0	12.0-46.0
				F	18	6.0-46.0
	M	0	12.0-46.0	M	0	12.0-46.0
				M	18	6.0-46.0
LH	m[IU]/mL			m[IU]/mL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	M	0	0.0-6.0	M	0	0.0-6.0
	M	8	1.5-9.3	M	8	1.5-9.3
	M	70	3.1-34.6	M	18	1.7-8.6
Total Protein	g/dL			g/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	4.2-6.2	F	0	4.2-6.2
	F	1M	4.4-6.6	F	1M	4.4-6.6
	F	6M	5.6-7.9	F	6M	5.6-7.9
	F	1	5.7-8.0	F	1	5.7-8.0
	F	18	6.4-8.3	F	18	6.6-8.7

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

	M	0	4.2-6.2	M	0	4.2-6.2
	M	1M	4.4-6.6	M	1M	4.4-6.6
	M	6M	5.6-7.9	M	6M	5.6-7.9
	M	1	5.7-8.0	M	1	5.7-8.0
	M	18	6.4-8.3	M	18	6.6-8.7
Magnesium	mg/dL			mg/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	1.6-2.6	F	0	1.6-2.6
				F	61	1.6-2.4
				F	91	1.7-2.3
	M	0	1.6-2.6	M	0	1.6-2.6
				M	61	1.6-2.4
			M	91	1.7-2.3	
Primidone Level	ug/mL			ug/mL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	7.0-10.0	F	0	7.0-10.0
	F	5	9.0-12.5	F	5	9.0-12.5
				F	18	5.0-12.0
	M	0	7.0-10.0	M	0	7.0-10.0
	M	5	9.0-12.5	M	5	9.0-12.5
			M	18	5.0-12.0	
Procalcitonin	ng/mL			ng/mL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	<2.00	F	0	<2.00
	F	1D	<20.00	F	1D	<20.00
	F	3D	<0.10	F	3D	<0.10
				F	18	0.0-0.1
	M	0	<2.00	M	0	<2.00
	M	1D	<20.00	M	1D	<20.00
	M	3D	<0.10	M	3D	<0.10
			M	18	0.0-0.1	
PSA Screen	ng/mL			ng/mL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	M	0	0.0-2.0	M	0	<2.6
	M	41	0.0-2.5	M	51	<3.6
	M	50	0.0-3.5	M	61	<4.1
	M	60	0.0-4.5	M	71	<6.6
	M	70	0.0-6.5	M	81	<7.2
	M	80	0.0-7.2			
PSA	ng/mL			ng/mL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	M	0	0.0-2.0	M	0	<2.6
	M	41	0.0-2.5	M	51	<3.6
			M	61	<4.1	

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

	M	60	0.0-4.5	M	71	<6.6
	M	70	0.0-6.5	M	81	<7.2
	M	80	0.0-7.2			
Chloride, CSF	mmol/L			mmol/L		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	118-132	F	0	
	M	0	118-132	M	0	
LDH, CSF	U/L			U/L		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	36-80	F	0	
	M	0	36-80	M	0	
T4, Total	ug/dL			ug/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	5D	5.0-18.5	F	5D	5.0-18.5
	F	2M	5.4-17.0	F	2M	5.4-17.0
	F	11M	5.7-16.0	F	11M	5.7-16.0
	F	1	6.0-14.7	F	1	6.0-14.7
	F	6	6.0-13.8	F	6	6.0-13.8
	F	11	5.9-13.2	F	11	5.9-13.2
	F	20	4.5-11.7	F	18	4.5-11.7
	M	5D	5.0-18.5	M	5D	5.0-18.5
	M	2M	5.4-17.0	M	2M	5.4-17.0
	M	11M	5.7-16.0	M	11M	5.7-16.0
	M	1	6.0-14.7	M	1	6.0-14.7
	M	6	6.0-13.8	M	6	6.0-13.8
	M	11	5.9-13.2	M	11	5.9-13.2
	M	20	4.5-11.7	M	18	4.5-11.7
Free T4	ng/dL			ng/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	0.9-2.5	F	0	0.9-2.5
	F	6D	0.9-2.2	F	6D	0.9-2.2
	F	2M	0.9-2.0	F	2M	0.9-2.0
	F	1	1.0-1.8	F	1	1.0-1.8
	F	6	1.0-1.7	F	6	1.0-1.7
	F	11	1.0-1.6	F	11	1.0-1.6
	F	20	0.9-1.7	F	18	0.9-1.7
	M	0	0.9-2.5	M	0	0.9-2.5
	M	6D	0.9-2.2	M	6D	0.9-2.2
	M	2M	0.9-2.0	M	2M	0.9-2.0
	M	1	1.0-1.8	M	1	1.0-1.8
	M	6	1.0-1.7	M	6	1.0-1.7
	M	11	1.0-1.6	M	11	1.0-1.6
	M	20	0.9-1.7	M	18	0.9-1.7
Bilirubin Total	mg/dL			mg/dL		

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	0.0-5.0	F	0	0.0-5.0
	F	1D	0.0-6.8	F	1D	0.0-6.8
	F	3D	0.0-5.9	F	3D	0.0-5.9
	F	7D	0.0-1.3	F	7D	0.0-1.3
	F	1M	0.0-1.0	F	1M	0.0-1.0
	F	18	0.4-1.3	F	18	<1.2
	M	0	0.0-5.0	M	0	0.0-5.0
	M	1D	0.0-6.8	M	1D	0.0-6.8
	M	3D	0.0-5.9	M	3D	0.0-5.9
	M	7D	0.0-1.3	M	7D	0.0-1.3
	M	1M	0.0-1.0	M	1M	0.0-1.0
	M	18	0.4-1.3	M	18	<1.2
Total Iron Binding Capacity	ug/dL			ug/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	255-479	F	0	255-479
				F	18	250-400
	M	0	255-479	M	0	255-479
				M	18	250-400
TSH	u[IU]/mL			u[IU]/mL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	0.700-15.200	F	0	0.700-15.200
	F	6D	0.700-11.000	F	6D	0.700-11.000
	F	3M	0.700-8.400	F	3M	0.700-8.400
	F	1	0.700-6.000	F	1	0.700-6.000
	F	6	0.600-4.800	F	6	0.600-4.800
	F	11	0.500-4.300	F	11	0.500-4.300
	F	20	0.270-4.200	F	18	0.270-4.200
	M	0	0.700-15.200	M	0	0.700-15.200
	M	6D	0.700-11.000	M	6D	0.700-11.000
	M	3M	0.700-8.400	M	3M	0.700-8.400
	M	1	0.700-6.000	M	1	0.700-6.000
	M	6	0.600-4.800	M	6	0.600-4.800
	M	11	0.500-4.300	M	11	0.500-4.300
	M	20	0.270-4.200	M	18	0.270-4.200
Calcium, Timed UR	mg/(24.h)			mg/(24.h)		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	<200	F	0	<200
				F	18	100-300
	M	0	<250	M	0	<250
				M	18	100-300
Creatinine Clearance	mL/min			mL/min		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	60-120	F	0	60-120

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

				F	18	66-143
	M	0	60-120	M	0	60-120
				M	18	66-143
Chloride, 24H UR	mmol/(24.h)			mmol/(24.h)		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	50-250	F	0	50-250
				F	18	110-250
	M	0	50-250	M	0	50-250
				M	18	110-250
Creatinine, 24H UR	mg/(24.h)			mg/(24.h)		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	800-1800	F	0	800-1800
	F	40	670-1350	F	40	720-1510
	F	50	640-1260			
	F	60	600-1140			
	F	70	540-1020			
	F	80	460-810			
	M	0	1000-2000	M	0	1000-2000
	M	40	770-1560	M	40	980-2200
	M	50	740-1450			
	M	60	690-1320			
	M	70	620-1180			
	M	80	530-930			
Creatinine Check	mg/dL			mg/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	>19	F	0	
	M	0	>19	M	0	
Magnesium, 24HR UR	mg/(24.h)			mg/(24.h)		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	51-269	F	0	51-269
				F	18	72.9-121.5
	M	0	51-269	M	0	51-269
				M	18	72.9-121.5
Myoglobin, UR	ng/mL			ng/mL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	<21	F	0	
	M	0	<21	M	0	
Uric Acid	mg/dL			mg/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	2.1-8.4	F	0	2.1-8.4
	F	1	1.9-5.4	F	1	1.9-5.4
	F	10	3.5-7.3	F	10	3.5-7.3
	F	19	3.2-7.1	F	18	2.4-5.7
	M	0	2.1-8.4	M	0	2.1-8.4

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

	M	1	1.9-5.4	M	1	1.9-5.4
	M	10	3.5-7.3	M	10	3.5-7.3
	M	19	3.8-8.2	M	18	3.4-7.0
Protein, Urine	mg/dL			mg/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	<10	F	0	
	M	0	<10	M	0	
Urea Nitrogen, 24H Urine	g/(24.h)			g/(24.h)		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	10-35	F	0	10-35
				F	18	12-20
	M	0	10-35	M	0	10-35
				M	18	12-20
Uric Acid, 24H Urine	mg/(24.h)			mg/(24.h)		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	<750	F	0	<750
				F	18	200-1000
	M	0	<750	M	0	<750
				M	18	200-1000
Vancomycin Peak	ug/mL			ug/mL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	25-50	F	0	25-50
				F	18	20-40
	M	0	25-50	M	0	25-50
				M	18	20-40
VLDL Cholesterol	mg/dL			mg/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
				F	18	<30
				M	18	<30

North Ankeny Units of Measure & Reference Range

Current Lab Test	Current Unit of Measure & Reference Range			New Unit of Measure & Reference Range starting 6/16/2026		
Anion Gap	mmol/L			mmol/L		
	Sex	Age	Reference Range	Sex	Age	Reference Range
				F	0	
				F	18	6-14
				M	0	
				M	18	6-14
Albumin	g/dL			g/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	2.8-4.4	F	0	2.8-4.4
	F	5D	3.8-5.4	F	5D	3.8-5.4

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

	F	15	3.2-4.5	F	15	3.2-4.5
	F	19	3.5-5.2	F	18	3.5-5.2
	M	0	2.8-4.4	M	0	2.8-4.4
	M	5D	3.8-5.4	M	5D	3.8-5.4
	M	15	3.2-4.5	M	15	3.2-4.5
	M	19	3.5-5.2	M	18	3.5-5.2
Alkaline Phosphatase	U/L			U/L		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	83-248	F	0	83-248
	F	15D	122-469	F	15D	122-469
	F	1	142-335	F	1	142-335
	F	10	129-417	F	10	129-417
	F	13	57-254	F	13	57-254
	F	15	50-117	F	15	50-117
	F	17	45-87	F	17	45-87
	F	19	35-104	F	18	35-104
	M	0	83-248	M	0	83-248
	M	15D	122-469	M	15D	122-469
	M	1	142-335	M	1	142-335
	M	10	129-417	M	10	129-417
	M	13	116-468	M	13	116-468
	M	15	82-331	M	15	82-331
	M	17	55-149	M	17	55-149
	M	19	40-129	M	18	40-129
AST	U/L			U/L		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	8-50	F	0	8-50
	F	14	8-43	F	18	<32
	M	0	8-60	M	0	8-60
	M	14	8-48	M	18	<40
BUN	mg/dL			mg/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	6-20	F	0	6-20
				F	61	8-23
	M	0	6-20	M	0	6-20
				M	61	8-23
Calcium	mg/dL			mg/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	7.6-10.4	F	0	7.6-10.4
	F	10D	9.0-11.0	F	10D	9.0-11.0
	F	31D	9.0-11.0	F	31D	9.0-11.0
	F	2	8.8-10.8	F	2	8.8-10.8

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

	F	12	8.4-10.2	F	12	8.4-10.2
	F	19	8.5-10.5	F	18	8.6-10.0
				F	61	8.8-10.2
				F	91	8.2-9.6
	M	0	7.6-10.4	M	0	7.6-10.4
	M	10D	9.0-11.0	M	10D	9.0-11.0
	M	31D	9.0-11.0	M	31D	9.0-11.0
	M	2	8.8-10.8	M	2	8.8-10.8
	M	12	8.4-10.2	M	12	8.4-10.2
	M	19	8.5-10.5	M	18	8.6-10.0
				M	61	8.8-10.2
				M	91	8.2-9.6
Creatinine	mg/dL			mg/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
				F	0	
	F	1	0.1-0.4	F	1	0.1-0.4
	F	4	0.2-0.5	F	4	0.2-0.5
	F	6	0.3-0.6	F	6	0.3-0.6
	F	9	0.4-0.7	F	9	0.4-0.7
	F	16	0.6-1.1	F	18	0.51-0.95
				M	0	
	M	1	0.1-0.4	M	1	0.1-0.4
	M	3	0.1-0.5	M	3	0.1-0.5
	M	5	0.2-0.6	M	5	0.2-0.6
	M	10	0.3-0.7	M	10	0.3-0.7
	M	12	0.4-0.8	M	12	0.4-0.8
	M	14	0.5-0.9	M	14	0.5-0.9
	M	16	0.8-1.3	M	18	0.67-1.17
Bilirubin, Direct	mg/dL			mg/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	0.0-0.3	F	0	0.0-0.3
				F	18	0.0-0.2
	M	0	0.0-0.3	M	0	0.0-0.3
				M	18	0.0-0.2
	*Note: Indirect Bilirubin calculation will be added to all UPH Standardized Chemistry panels that include Total Bilirubin and Indirect Bilirubin for all UPH markets.					
Glucose	mg/dL			mg/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	45-100	F	0	45-100
	F	1D	45-90	F	1D	45-90
	F	2D	60-90	F	2D	60-90
	F	3D	70-99	F	3D	70-99
	F	1M	70-99	F	1M	70-99

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

	F	18	70-99	F	18	70-180
	M	0	45-100	M	0	45-100
	M	1D	45-90	M	1D	45-90
	M	2D	60-90	M	2D	60-90
	M	3D	70-99	M	3D	70-99
	M	1M	70-99	M	1M	70-99
	M	18	70-99	M	18	70-180
Glucose, Fasting	mg/dL			mg/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	45-100	F	0	45-100
	F	1D	45-90	F	1D	45-90
	F	2D	60-90	F	2D	60-90
	F	3D	70-99	F	3D	70-99
	F	31D	70-99	F	31D	70-99
				F	18	70-100
	M	0	45-100	M	0	45-100
	M	1D	45-90	M	1D	45-90
	M	2D	60-90	M	2D	60-90
	M	3D	70-99	M	3D	70-99
	M	31D	70-99	M	31D	70-99
				M	18	70-100
	Magnesium	mg/dL			mg/dL	
Sex		Age	Reference Range	Sex	Age	Reference Range
F		0	1.6-2.6	F	0	1.6-2.6
				F	61	1.6-2.4
				F	91	1.7-2.3
M		0	1.6-2.6	M	0	1.6-2.6
				M	61	1.6-2.4
				M	91	1.7-2.3
Sodium						
	Sex	Age	Reference Range	Sex	Age	Reference Range
	0	125-155	0	F	0D	125-155
	1D	134-160	1D	F	1D	134-160
	2D	139-160	2D	F	2D	139-160
	3D	136-145	3D	F	3D	136-145
				F	4D	136-145
	0	125-155	0	M	0D	125-155
	1D	134-160	1D	M	1D	134-160
	2D	139-160	2D	M	2D	139-160
	3D	136-145	3D	M	3D	136-145
			M	4D	136-145	
Creatinine, 24H Urine	mg/(24.h)			mg/(24.h)		

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	800-1800	F	0	800-1800
	F	40	670-1350	F	40	720-1510
	F	50	640-1260			
	F	60	600-1140			
	F	70	540-1020			
	F	80	460-810			
	M	0	1000-2000	M	0	1000-2000
	M	40	770-1560	M	40	980-2200
	M	50	740-1450			
	M	60	690-1320			
	M	70	620-1180			
	M	80	530-930			
Uric Acid	mg/dL			mg/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	2.1-8.4	F	0	2.1-8.4
	F	1	1.9-5.4	F	1	1.9-5.4
	F	10	3.5-7.3	F	10	3.5-7.3
	F	19	3.2-7.1	F	18	2.4-5.7
	M	0	2.1-8.4	M	0	2.1-8.4
	M	1	1.9-5.4	M	1	1.9-5.4
	M	10	3.5-7.3	M	10	3.5-7.3
	M	19	3.8-8.2	M	18	3.4-7.0
Protein, Urine	mg/dL			mg/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
	F	0	<10	F	0	
	M	0	<10	M	0	
Protein Urine, 24 HR	0-150 mg/dL			<150 mg/dL		
VLDL Cholesterol	mg/dL			mg/dL		
	Sex	Age	Reference Range	Sex	Age	Reference Range
				F	18	<30
			M	18	<30	

Clinical Laboratory Test Catalog Updates

Please note new testing details will not be visible in the test catalog until go-live on Tuesday, June 16th, 2026.

[CLICK HERE](#)

for the Test Catalog for Pathology Laboratory and Des Moines Hospitals

Ambulatory Pathway Changes (Clinic)

The following Ambulatory SmartSet/Pathway/Express Lanes will be updated based on the focused test and lab order changes in Epic.

Lab Chemistry Standardization Des Moines Hospitals & Clinics, Pathology Laboratory

Change: Hepatitis B Surface Antibody (LAB472) will be removed and replaced with Hepatitis BS AB QL/QN (LAB3480)

- UPH AMB Well 18-39 [1226]
- UPH AMB Well 18-39 Express Lane [1251]
- UPH AMB Well 40-64 [1237]
- UPH AMB Well Adult 40-64 Express Lane [1250]

Change: Cystatin C (LAB4447) will be removed and instead use Cystatin C (LAB3018).

- UPH AMB Pre Living Donor Transplant Order Panel [1238640]
- UPH AMB Pre Living Labs Panel [1238641]

Order Set Changes (Hospital/ED)

The following hospital and/or ED order sets will be updated based on the focused test and lab order changes identified below. Providers with user order set versions will get a notification when they open the impacted order set on what lab order has been removed.

Change: Hepatitis B Surface Antibody (LAB472) will be removed and replaced with Hepatitis BS AB QL/QN (LAB3480)

- Pediatric GI Endoscopy Pre Procedure [1233492]
- Pediatric Nephrotic Syndrome [1233272]
- Pre Term Labor Admission [1233029]
- Hemodialysis Focused [1234089]
- OB Triage [1233400]
- Adult Peritoneal Dialysis Focused [1234090]

Lab Staff – Sunquest Order Code Changes

This reference table outlines updates to Sunquest laboratory order codes, including old and new codes. Unless otherwise noted, all changes apply to all sites.

New Sunquest Order Name	Current Sunquest Order Code	New Sunquest Order Code starting 6/16/2026
MICROALBUMIN, URINE	NEW	ALBMIN
BILIRUBIN GROUP	BILTD	BILTDI
CONVERT BMP TO CMP	NEW	BM2CMP
C-REACTIVE PROTEIN	CRP	CRPL
FRACTION NA EXCRETION	NEW	FENA
HEPATITIS A AB IGM	HAVABB	HAVAB
ACUTE HEPATITIS PNL	HBATT	HBAT
HEP B CORE IGM	HBCIG	HBCIGM
HEPATITIS B SUR AG	HBSAGG	HBSAG
HEP B SUR AB QL	AHBS	HBSQAB
HEPATITIS C AB	HCVABB	HCVAB
MICROALB CREAT RATIO	UMINAL	MACRER
MICROALBUMIN 24 HR	NEW	MALB24
PROGESTERONE	PROG	PROGST
TSH WITH FT4 REFLEX	NEW	TSH3GR
CREATININE CLEARANCE	UCCL	UCCLR