

STRONG MEMORIAL HOSPITAL CHEMISTRY REFERENCE RANGES

TEST	AGE	CURRENT FEMALE RANGE	CURRENT MALE RANGE	UNITS	NEW 9.23.09 FEMALE RANGE	NEW 9.23.09 MALE RANGE	CRITICAL VALUE LOW	CRITICAL VALUE HIGH
	from → up to but NOT including							
GENERAL CHEMISTRIES								
50g SCREEN (GLU)	ALL	63-135	-	mg/dL	63-135	-	40	500
ALBUMIN	ALL	3.2-4.8	3.2-4.8	g/dL	3.5 - 5.2	3.5 - 5.2		
ALKALINE PHOS	0-5D	110-300	110-300	U/L	110-300	110-300		
	5D-4Y	145-320	145-320		145-320	145-320		
	4Y-7Y	150-380	150-380		150-380	150-380		
	7Y-10Y	175-420	175-420		175-420	175-420		
	10Y-12Y	130-560	135-530		130-560	135-530		
	12Y-14Y	105-420	200-495		105-420	200-495		
	14Y-16Y	70-230	130-525		70-230	130-525		
	16Y-20Y	50-130	65-260		50-130	65-260		
	≥ 20Y	45-129	45-129		35 - 105	40 - 130		
ALT	ALL	10 - 44	12 - 49	U/L	0 - 35	0 - 50		
AMMONIA	ALL	10 - 47	10 - 47	micro mol/L	10 - 47	10 - 47		
AMYLASE	ALL	30-118	30-118	U/L	28 - 100	28 - 100		
AST	ALL	0-34	0-34	U/L	0 - 35	0 - 50		
CALCIUM	0-11Y	9.0-10.8	9.0-10.8	mg/dL	9.0-10.8	9.0-10.8	6.5	13.0
	11Y-25Y	9.0-10.4	9.3-10.5		9.0-10.4	9.3-10.5	6.5	13.0
	25Y-45Y	8.8-10.2	9.0-10.3		8.8-10.2	9.0-10.3	6.5	13.0
	≥ 45 Y	8.6-10.2	8.6-10.2		8.6-10.2	8.6-10.2	6.5	13.0
CREAT (Enzymatic)	cord	0.6-1.2	0.6-1.2	mg/dL	0.6-1.2	0.6-1.2		
	0D-4D	0.3-1.0	0.3-1.0		0.3-1.0	0.3-1.0		
	4D-2Y	0.2-0.4	0.2-0.4		0.2-0.4	0.2-0.4		
	2Y-12Y	0.3-0.7	0.3-0.7		0.3-0.7	0.3-0.7		
	12Y-21Y	0.5-1.0	0.5-1.0		0.5-1.0	0.5-1.0		
	≥ 21Y	0.5-0.8	0.6-1.1		0.51 - 0.95	0.67 - 1.17		
CK	ALL	26 - 140	38 - 174	U/L	34 - 145	46 - 171		
CHLORIDE	ALL	99-109	99-109	mmol/L	96 - 108	96 - 108	80	120
CO2	ALL	20-32	20-32	mmol/L	20 - 28	20 - 28	10	40
CRP	ALL	0-10	0-10	mg/L	0-10	0-10		
hs CRP (high sensitivity)	ALL			mg/L	0 - 3	0 - 3		
DIRECT BILIRUBIN	0-6D	0-0.6	0-0.6	mg/dL	0-0.6	0-0.6		
	≥ 6D	0-0.5	0-0.5		0 - 0.3	0 - 0.3		

STRONG MEMORIAL HOSPITAL CHEMISTRY REFERENCE RANGES

TEST	AGE	CURRENT FEMALE RANGE	CURRENT MALE RANGE	UNITS	NEW 9.23.09 FEMALE RANGE	NEW 9.23.09 MALE RANGE	CRITICAL VALUE LOW	CRITICAL VALUE HIGH
	from \longrightarrow up to but NOT including							
ETHANOL	ALL	0	0	mg/dL	0	0		300
IRON	ALL	38-138	40-159	micro g/dL	34 - 165	45 - 170		
GGT	ALL	0-38	0-73	U/L	5 - 36	8 - 61		
GLUCOSE	0D	36-110	36-110	mg/dL	36-110	36-110	25	200
	1D-7D	47-117	47-117		47-117	47-117	40	200
	\geq 7D	74-106	74-106		74-106	74-106	40	500
HAPTOGLOBIN	ALL	40-240	40-240	mg/dL	30 - 200	30 - 200		
TIBC	ALL	250-450	250-450	micro g/dL	250-450	250-450		
UIBC	ALL			micro g/dL	110 - 370	110 - 370		
K	0-2D	4.5-7.7	4.5-7.7	mmol/L	4.5-7.7	4.5-7.7	2.8	8.0
	2D-4M	4.0-6.4	4.0-6.4		4.0-6.4	4.0-6.4	2.8	7.0
	4M-2Y	3.7-5.6	3.7-5.6		3.7-5.6	3.7-5.6	2.8	6.2
	2Y-17Y	3.6-5.2	3.6-5.2		3.6-5.2	3.6-5.2	2.8	6.2
	\geq 17Y	3.5-5.5	3.5-5.5		3.3 - 5.1	3.3 - 5.1	2.8	6.2
LACTATE	ALL	0.5-2.2	0.5-2.2	mmol/L	0.5-2.2	0.5-2.2		3.5
LD	ALL	120-246	120-246	U/L	118 - 225	118 - 225		
LIPASE	ALL	6 - 51	6 - 51	U/L	13 - 60	13 - 60		
MAGNESIUM	ALL	1.1 - 2.2	1.1 - 2.2	mEq/L	1.3 - 2.1	1.3 - 2.1	0.8	4.0
SODIUM	ALL	132-146	132-146	mmol/L	133 - 145	133 - 145	120	160
TOTAL BILIRUBIN	0D	2.0-6.0	2.0-6.0	mg/dL	2.0-6.0	2.0-6.0		15.0
	1D	6.0-7.0	6.0-7.0		6.0-7.0	6.0-7.0		15.0
	2D	4.0-12.0	4.0-12.0		4.0-12.0	4.0-12.0		15.0
	3D-7D	0.0 - 1.4	0.0 - 1.4		0.0 - 1.4	0.0 - 1.4		15.0
	\geq 7D	0.3-1.5	0.3-1.5		0 - 1.2	0 - 1.2		
PHOS	0D	4.2-8.5	4.2-8.5	mg/dL	4.2-8.5	4.2-8.5	1.1	9.0
	1D-13Y	4.0-6.5	4.0-6.5		4.0-6.5	4.0-6.5	1.1	9.0
	\geq 13Y	2.4-5.1	2.4-5.1		2.7 - 4.5	2.7 - 4.5	1.1	9.0
TOTAL PROTEIN	ALL	5.7-8.2	5.7-8.2	g/dL	6.3 - 7.7	6.3 - 7.7		
UN	ALL	9.-23	9.-23	mg/dL	6 - 20	6 - 20		
URATE	ALL	3.1-7.8	3.7-9.2	mg/dL	2.7 - 6.8	3.9 - 9.0		

STRONG MEMORIAL HOSPITAL CHEMISTRY REFERENCE RANGES

TEST	AGE	CURRENT FEMALE RANGE	CURRENT MALE RANGE	UNITS	NEW 9.23.09 FEMALE RANGE	NEW 9.23.09 MALE RANGE	CRITICAL VALUE	CRITICAL VALUE
	from → up to but NOT including						LOW	HIGH
CHOL, TOTAL	ALL	<200 Desirable 200-239 Borderline High >239 High	<200 Desirable 200-239 Borderline High >239 High	mg/dL	<200 Desirable 200-239 Borderline High >239 High	<200 Desirable 200-239 Borderline High >239 High		
CHOL, HDL	ALL	<40 Low >60 High	<40 Low >60 High	mg/dL	<40 Low >60 High	<40 Low >60 High		
CHOL, LDL	ALL	<100 Optimal 100-129 Near or above Optimal 130-159 Borderline High 160-189 High >189 Very High	<100 Optimal 100-129 Near or above Optimal 130-159 Borderline High 160-189 High >189 Very High	mg/dL	<100 Optimal 100-129 Near or above Optimal 130-159 Borderline High 160-189 High >189 Very High	<100 Optimal 100-129 Near or above Optimal 130-159 Borderline High 160-189 High >189 Very High		
TRIG	ALL	<150 Normal 150-199 Borderline High 200-499 High >499 Very High	<150 Normal 150-199 Borderline High 200-499 High >499 Very High	mg/dL	<150 Normal 150-199 Borderline High 200-499 High >499 Very High	<150 Normal 150-199 Borderline High 200-499 High >499 Very High		
CSF								
GLUCOSE, CSF	ALL	50-80	50-80	mg/dL	50-80	50-80	37	
LACTATE, CSF	ALL	0-2.8	0-2.8	mmol/L	0-2.8	0-2.8		
POTASSIUM, CSF	ALL	2.6-3.0	2.6-3.0	mmol/L	2.6-3.0	2.6-3.0		
SODIUM, CSF	ALL	136-150	136-150	mmol/L	136-150	136-150		
TOTAL PROTEIN, CSF	0-8D 8D-1M 1M 2M 3M-6M 6M-10Y 10Y-16Y ≥16Y	33-108 31-90 27-77 18-60 10-.40 10-.32 10-.41 12-.60	33-108 31-90 27-77 18-60 10-.40 10-.32 10-.41 12-.60	mg/dL	33-108 31-90 27-77 18-60 10-.40 10-.32 10-.41 12-.60	33-108 31-90 27-77 18-60 10-.40 10-.32 10-.41 12-.60		

STRONG MEMORIAL HOSPITAL CHEMISTRY REFERENCE RANGES

TEST	AGE	CURRENT FEMALE RANGE	CURRENT MALE RANGE	UNITS	NEW 9.23.09 FEMALE RANGE	NEW 9.23.09 MALE RANGE	CRITICAL VALUE LOW	CRITICAL VALUE HIGH
	from \longrightarrow up to but NOT including							
THERAPEUTIC DRUG MONITORING (TDM)								
		THERAPEUTIC RANGE FEMALE	THERAPEUTIC RANGE MALE					
ACETAMINOPHEN	ALL	-	-	micro gram/mL	-	-		50
CAFFEINE	ALL	5.0-20.0	5.0-20.0	micro gram/mL	5.0-20.0	5.0-20.0		
CARBAMAZEPINE	ALL	4.0-12.0	4.0-12.0	micro gram/mL	4.0-12.0	4.0-12.0		15
DIGOXIN	ALL	0.8 - 2.0	0.8 - 2.0	ng/mL	0.8 - 2.0	0.8 - 2.0		2.5
LITHIUM	ALL	0.6-1.2	0.6-1.2	mmol/L	0.6-1.2	0.6-1.2		1.5
PHENOBARBITAL	ALL	15.0-40.0	15.0-40.0	micro gram/mL	15.0-40.0	15.0-40.0		50
PHENYTOIN	ALL	10.0-20.0	10.0-20.0	micro gram/mL	10.0-20.0	10.0-20.0		40
SALICYLATE	ALL	15.0-30.0	15.0-30.0	mg/dL	15.0-30.0	15.0-30.0		50
THEOPHYLLINE	ALL	10.0-20.0	10.0-20.0	micro gram/mL	10.0-20.0	10.0-20.0		25
VALPROATE	ALL	50-100	50-100	micro gram/mL	50-100	50-100		150
URINES								
URINE AMYLASE	ALL	-	-	U/L	-	-		
URINE CALCIUM	ALL	100 - 240	100 - 240	mg/24 hours	100 - 240	100 - 240		
URINE CHLORIDE	ALL	110 - 250	110 - 250	mmol/24 hours	110 - 250	110 - 250		
URINE CREATININE	ALL	600 - 1600	800 - 1800	mg/24 hours	600 - 1600	800 - 1800		
URINE POTASSIUM	ALL	25 - 125	25 - 125	mmol/24 hours	25 - 125	25 - 125		
URINE MAGNESIUM	ALL	6 - 10	6 - 10	mEq/24 hours	6 - 10	6 - 10		
URINE SODIUM	ALL	40 - 220	40 - 220	mmol/24 hours	40 - 220	40 - 220		
URINE PHOSPHORUS	ALL	400 - 1300	400 - 1300	mg/24 hours	400 - 1300	400 - 1300		
URINE TOTAL PROTEIN	ALL	0 - 149	0 - 149	mg/24 hours	0 - 149	0 - 149		
URINE URATE	ALL	250 - 750	250 - 750	mg/24 hours	250 - 750	250 - 750		
URINE UREA NITROGEN	ALL	12,000 - 20,000	12,000 - 20,000	mg/24 hours	12,000 - 20,000	12,000 - 20,000		
CREATININE CLEARANCE	ALL	87 - 107	107 - 139	mL/min	87 - 107	107 - 139		

STRONG MEMORIAL HOSPITAL CHEMISTRY REFERENCE RANGES

TEST	AGE	CURRENT FEMALE RANGE	CURRENT MALE RANGE	UNITS	NEW 9.23.09 FEMALE RANGE	NEW 9.23.09 MALE RANGE	CRITICAL VALUE	CRITICAL VALUE
	from → up to but NOT including						LOW	HIGH

STRONG MEMORIAL HOSPITAL CHEMISTRY REFERENCE RANGES

TEST	AGE	CURRENT FEMALE RANGE	CURRENT MALE RANGE	UNITS	NEW 9.23.09 FEMALE RANGE	NEW 9.23.09 MALE RANGE	CRITICAL VALUE	CRITICAL VALUE
	from \longrightarrow up to but NOT including						LOW	HIGH
DRUGS OF ABUSE TESTING IN URINE (DAU)								
		EXPECTED RANGE FEMALE	EXPECTED RANGE MALE				POS CUTOFF VALUE	
AMPHETAMINES	ALL	NEG	NEG	ng/mL	NEG	NEG		1000
BARBITURATES	ALL	NEG	NEG	ng/mL	NEG	NEG		200 (was 300)
BENZODIAZEPINES	ALL	NEG	NEG	ng/mL	NEG	NEG		200 (was 3000)
COCAINE/METABOLITE	ALL	NEG	NEG	ng/mL	NEG	NEG		300
EDDP (METHADONE METABOLITE)	ALL	NEG	NEG	ng/mL	NEG	NEG		100
PCP	ALL	NEG	NEG	ng/mL	NEG	NEG		25
OPIATES	ALL	NEG	NEG	ng/mL	NEG	NEG		300
PROPOXYPHENE	ALL	NEG	NEG	ng/mL	NEG	NEG		300
THC	ALL	NEG	NEG	ng/mL	NEG	NEG		20 (was 25)
ETHANOL	ALL	NEG	NEG	mg/dL	NEG	NEG		300