Newborn Screening Quality Assurance Program
Biochemical Proficiency Testing Program
2024 Quarter 4 Report

Provided by the Newborn Screening and Molecular Branch
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REPORT AUTHORIZATION
Dr. Stanimila Nikolova, Laboratory Chief of the Proficiency Testing and Reference Materials team reviewed and authorized this report.

CONFIDENTIALITY STATEMENT
NSQAP participant reports and evaluations are strictly confidential and only available by accessing the NSQAP Participant Portal.

Event Summary

This report summarizes proficiency testing (PT) data received during the 2024 Quarter 4 Newborn Screening Quality Assurance Program's (NSQAP) PT event. Data were collected in the NSQAP participant portal. https://nbs.dynamics365portals.us/

On September 24, 2024, NSQAP distributed panels of five unknown dried blood spot (DBS) specimens to all active participants.

The hormone panel contained predetermined concentrations of thyroxine (T4), thyroid-stimulating hormone (TSH), 17 *α*- hydroxyprogesterone (17OHP), and total galactose (TGal). The amino acid panel contained arginine (Arg), citrulline (Cit), creatine (Cre), guanidinoacetic acid (GUAC), guanidinoacetate methyltransferase deficiency ratio (GAMTr), leucine (Leu), methionine (Met), phenylalanine (Phe), succinylacetone (SUAC), tyrosine (Tyr), and valine (Val). The acylcarnitine panel contained low free carnitine (C0(L)), low acylcarnitine (C2(L)), propionylcarnitine (C3), malonylcarnitine [derivatized] (C3DC), butyrylcarnitine (C4), hydroxybutyrylcarnitine [derivatized] (C4OH), malonylcarnitine + hydroxybutyrylcarnitine [non- derivatized] (C3DC+C4OH), isovalerylcarnitine (C5), tiglylcarnitine (C5:1), glutarylcarnitine (C5DC), hydroxyisovalerylcarnitine, (C5OH), hexanoylcarnitine, (C6), octanoylcarnitine(C8), decanoylcarnitine (C10), decenoylcarnitine (C10:1), decadienoylcarnitine (C10:2), myristoylcarnitine (C14), tetradecenoylcarnitine (C14:1), palmitoylcarnitine (C16), hydroxypalmitoylcarnitine (C16OH), stearoylcarnitine (C18), oleoylcarnitine (C18:1) and hydroxystearoylcarnitine (C18OH). Separate panels for biotinidase deficiency (BIOT), galactose-1- phosphate uridyltransferase (GALT) deficiency, glucose-6-phosphate dehydrogenase (G6PD) deficiency, and immunoreactive trypsinogen (IRT) were sent to participating laboratories. We processed data from 422 laboratories.

Specimen Consensus

A consensus of 80% of US laboratories, as long as 10 or more US laboratories report results, must be reached for a specimen to be evaluated. If less than 10 US laboratories reporting results for any one specimen, all submitted results were evaluated. NSQAP occasionally challenges cutoff levels by enriching samples near cutoff levels. The NSQAP PT Committee closely reviews all specimen data. Specimens that were not evaluated are considered educational.

Specimen 20244006003 for C0(L) was did not meet the 80% consensus and was not evaluated.

Evaluations

NSQAP evaluated each specimen as “Acceptable” or “Unacceptable.” For each analyte and specimen, the participating laboratory’s assessment must match the CDC certified assessment to achieve an “Acceptable” evaluation. When assessments differ, the evaluation will be “Unacceptable.” NSQAP does not identify “Unacceptable” results as “false negative” or “false positive.” It is the responsibility of the laboratory to categorize “Unacceptable” results according to their protocols and policies.

Proficiency Testing Materials Preparation

NSQAP produces PT specimens from adult donor blood products and purchased umbilical cord blood, adjusted to 50% hematocrit before applying to filter paper. NSQAP tests PT specimens for homogeneity, accuracy, stability, and suitability for newborn screening assays.

- **Amino acid and acylcarnitine specimens** were enriched with commercially available standards. Small variances in enrichments and recoveries might result from impurities in the purchased materials.
    - **C0(L) and C2(L) PT deficient specimens** were produced by washing fresh RBCs at least six times then combining with charcoal-stripped plasma.

- **Congenital hypothyroid PT specimens** were enriched with measured amounts of T4 and TSH after reconstituting washed RBCs with purchased T4-depleted charcoal-stripped plasma.

- **TGal specimens** were enriched with galactose and galactose-1-phosphate, allowing measurement of free galactose (galactose alone) and total galactose (free galactose plus galactose-1- phosphate).

- **BIOT deficient PT specimens** were made using heat-treated charcoal-stripped plasma combined with compatible donor RBCs.

- **GALT and G6PD deficient PT specimens** were made using a 50/50 saline/serum solution combined with compatible washed RBCs and followed by heat-treatment.

- **IRT specimens** were made from washed, hematocrit-adjusted blood treated with a protease inhibitor then enriched with commercially purchased IRT.

Proficiency Testing Data Handling

Tables in this report include Specimen Certification, Frequency Distribution of Participants’ Clinical Assessments, Overall Statistics, and Mean Reported Concentration by Method. Individual laboratory data certification and evaluations are found in a separate report.

Newborn Screening Quality Assurance Program
Specimen Certification
Year: 2024 Quarter: 4

Program: Amino Acids
Expected Values

	Specimen				
	20244005001	20244005002	20244005003	20244005004	20244005005
Analyte	Expected Value	Expected Value	Expected Value	Expected Value	Expected Value
Arg (µmol/L blood)	7.7	186.3	6.4	6.2	8.0
CRE	328.6	431.0	425.0	447.0	322.0
Cit (µmol/L blood)	5.9	10.6	10.8	162.6	6.0
GAMTr	3.0	2.6	2.8	3.1	2.8
GUAC	1.0	1.1	1.2	1.4	0.9
Leu (µmol/L blood)	22.5	16.9	18.4	18.7	571.4
Met (µmol/L blood)	1.7	2.1	172.1	1.7	1.8
Phe (µmol/L blood)	6.3	5.6	5.5	5.4	6.1
SUAC (µmol/L blood)	0.2	0.2	0.2	0.3	0.2
Tyr (µmol/L blood)	13.7	10.3	10.4	9.7	13.4
Val (µmol/L blood)	30.9	23.7	23.4	21.2	579.6

Note: Expected Value = sum of endogenous and enrichment values

Program: Amino Acids
Expected Clinical Assessments

	Specimen				
	20244005001	20244005002	20244005003	20244005004	20244005005
Analyte	Expected Assessment	Expected Assessment	Expected Assessment	Expected Assessment	Expected Assessment
Arg (µmol/L blood)	1	2	1	1	1
CRE	1	1	1	1	1
Cit (µmol/L blood)	1	1	1	2	1
GAMTr	1	1	1	1	1
GUAC	1	1	1	1	1
Leu (µmol/L blood)	1	1	1	1	2
Met (µmol/L blood)	1	1	2	1	1
Phe (µmol/L blood)	1	1	1	1	1
SUAC (µmol/L blood)	1	1	1	1	1
Tyr (µmol/L blood)	1	1	1	1	1
Val (µmol/L blood)	1	1	1	1	2

Note: 1 = Within Normal Limits, 2 = Outside Normal Limits, NE = Not Evaluated

Newborn Screening Quality Assurance Program
Specimen Certification
Year: 2024 Quarter: 4

Program: Acylcarnitines
Expected Values

	Specimen				
	20244006001	20244006002	20244006003	20244006004	20244006005
Analyte	Expected Value	Expected Value	Expected Value	Expected Value	Expected Value
C0(L) (µmol/L blood)	32.60	32.88	6.82	32.88	29.90
C2(L) (µmol/L blood)	22.87	22.92	4.09	23.02	27.91
C3 (µmol/L blood)	0.47	0.47	0.51	0.47	12.60
C3DC (µmol/L blood)	15.02	0.03	0.04	0.02	0.02
C3DC+C4OH (µmol/L blood)	15.04	0.04	0.03	0.05	0.04
C4 (µmol/L blood)	0.07	0.07	0.06	0.07	0.06
C4OH (µmol/L blood)	0.05	0.07	0.05	0.05	0.05
C5 (µmol/L blood)	0.04	0.04	0.04	0.04	0.04
C5:1 (µmol/L blood)	0.01	0.01	0.02	0.01	0.02
C5DC (µmol/L blood)	0.01	0.01	0.02	0.01	0.01
C5OH (µmol/L blood)	0.17	0.19	0.21	0.17	0.30
C6 (µmol/L blood)	0.01	1.51	0.02	0.01	0.02
C8 (µmol/L blood)	0.01	2.01	0.01	0.01	0.02
C10 (µmol/L blood)	0.01	1.41	0.02	0.01	0.01
C10:1 (µmol/L blood)	0.01	1.11	0.02	0.02	0.02
C10:2 (µmol/L blood)	0.00	0.01	0.01	0.01	0.01
C14 (µmol/L blood)	0.02	0.03	0.03	0.03	0.08
C14:1 (µmol/L blood)	0.01	0.01	0.01	0.01	0.01
C16 (µmol/L blood)	0.36	0.37	0.36	0.38	0.60
C16OH (µmol/L blood)	0.01	0.01	0.01	1.71	0.01
C18 (µmol/L blood)	0.25	0.26	0.29	0.26	0.53
C18:1 (µmol/L blood)	0.74	0.77	0.35	0.76	0.64
C18OH (µmol/L blood)	0.00	0.01	0.01	2.01	0.01

Note: Expected Value = sum of endogenous and enrichment values

Newborn Screening Quality Assurance Program
Specimen Certification
Year: 2024 Quarter: 4

Program: Acylcarnitines
Expected Clinical Assessments

	Specimen				
	20244006001	20244006002	20244006003	20244006004	20244006005
Analyte	Expected Assessment	Expected Assessment	Expected Assessment	Expected Assessment	Expected Assessment
C0(L) (µmol/L blood)	1	1	NE	1	1
C2(L) (µmol/L blood)	1	1	2	1	1
C3 (µmol/L blood)	1	1	1	1	2
C3DC (µmol/L blood)	2	1	1	1	1
C3DC+C4OH (µmol/L blood)	2	1	1	1	1
C4 (µmol/L blood)	1	1	1	1	1
C4OH (µmol/L blood)	1	1	1	1	1
C5 (µmol/L blood)	1	1	1	1	1
C5:1 (µmol/L blood)	1	1	1	1	1
C5DC (µmol/L blood)	1	1	1	1	1
C5OH (µmol/L blood)	1	1	1	1	1
C6 (µmol/L blood)	1	2	1	1	1
C8 (µmol/L blood)	1	2	1	1	1
C10 (µmol/L blood)	1	2	1	1	1
C10:1 (µmol/L blood)	1	2	1	1	1
C10:2 (µmol/L blood)	1	1	1	1	1
C14 (µmol/L blood)	1	1	1	1	1
C14:1 (µmol/L blood)	1	1	1	1	1
C16 (µmol/L blood)	1	1	1	1	1
C16OH (µmol/L blood)	1	1	1	2	1
C18 (µmol/L blood)	1	1	1	1	1
C18:1 (µmol/L blood)	1	1	1	1	1
C18OH (µmol/L blood)	1	1	1	2	1

Note: 1 = Within Normal Limits, 2 = Outside Normal Limits, NE = Not Evaluated

Newborn Screening Quality Assurance Program
Specimen Certification
Year: 2024 Quarter: 4

Program: HORMPT
Expected Values

	Specimen				
	20244001001	20244001002	20244001003	20244001004	20244001005
Analyte	Expected Value	Expected Value	Expected Value	Expected Value	Expected Value
T4 (µg/dL serum)	15.4	15.5	8.2	16.0	15.4
TSH (µIU/mL serum)	1.4	1.5	91.6	1.2	1.4
17OHP (ng/mL serum)	86.3	0.9	0.9	0.9	0.4
TGal (mg/dL blood)	0.0	0.0	0.9	25.0	0.0

Note: Expected Value = sum of endogenous and enrichment values

Program: Hormones and Total Galactose
Expected Clinical Assessments

	Specimen				
	20244001001	20244001002	20244001003	20244001004	20244001005
Analyte	Expected Assessment	Expected Assessment	Expected Assessment	Expected Assessment	Expected Assessment
T4 (µg/dL serum)	1	1	1	1	1
TSH (µIU/mL serum)	1	1	2	1	1
17OHP (ng/mL serum)	2	1	1	1	1
TGal (mg/dL blood)	1	1	1	2	1

Note: 1 = Within Normal Limits, 2 = Outside Normal Limits, NE = Not Evaluated

Newborn Screening Quality Assurance Program
Specimen Certification
Year: 2024 Quarter: 4

Program: Immunoreactive Trypsinogen
Expected Values

	Specimen				
	20244008001	20244008002	20244008003	20244008004	20244008005
Analyte	Expected Value	Expected Value	Expected Value	Expected Value	Expected Value
IRT (ng/mL blood)	249.6	10.5	5.5	14.0	133.8

Note: Expected Value = sum of endogenous and enrichment values

Program: Immunoreactive Trypsinogen
Specimen Certification

	Specimen				
	20244008001	20244008002	20244008003	20244008004	20244008005
Analyte	Expected Assessment	Expected Assessment	Expected Assessment	Expected Assessment	Expected Assessment
IRT (ng/mL blood)	2	1	1	1	2

Note: 1 = Within Normal Limits, 2 = Outside Normal Limits, NE = Not Evaluated

Newborn Screening Quality Assurance Program
Specimen Certification
Year: 2024 Quarter: 4

Program: Biotinidase
Expected Clinical Assessments

	Specimen				
	20244007001	20244007002	20244007003	20244007004	20244007005
Analyte	Expected Assessment	Expected Assessment	Expected Assessment	Expected Assessment	Expected Assessment
BIOT	1	1	2	1	1

Program: Galactose-1-phosphate Uridyltransferase
Expected Clinical Assessments

	Specimen				
	20244009001	20244009002	20244009003	20244009004	20244009005
Analyte	Expected Assessment	Expected Assessment	Expected Assessment	Expected Assessment	Expected Assessment
GALT	1	1	2	1	1

Program: Glucose-6-phosphate Dehydrogenase Deficiency
Expected Clinical Assessments

	Specimen				
	20244003001	20244003002	20244003003	20244003004	20244003005
Analyte	Expected Assessment	Expected Assessment	Expected Assessment	Expected Assessment	Expected Assessment
G6PD	1	1	2	1	1

Note: 1 = Within Normal Limits, 2 = Outside Normal Limits, NE = Not Evaluated

Newborn Screening Quality Assurance Program
Frequency Distribution of Participants' Clinical Assessments

Program: Acylcarnitines (ACPT)

Domestic

	Specimen Number									
	20244006001		20244006002		20244006003		20244006004		20244006005	
Analyte	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL
C0(L)	0	45	0	45	23	22	0	45	0	45
C2(L)	0	20	0	20	18	2	0	20	0	20
C3	0	45	0	45	0	45	0	45	44	1
C3DC	9	0	0	9	0	9	0	9	0	9
C3DC+C4OH	31	0	0	31	0	31	0	31	0	31
C4	0	40	0	40	0	40	0	40	0	40
C4OH	0	7	0	7	0	7	0	7	0	7
C5	0	45	0	45	0	45	0	45	0	45
C5:1	0	44	0	44	0	44	0	44	0	44
C5DC	0	43	0	43	0	43	0	43	0	43
C5OH	0	43	0	43	0	43	0	43	0	43
C6	0	38	38	0	0	38	0	38	0	38
C8	0	45	45	0	0	45	0	45	0	45
C10	0	38	38	0	0	38	0	38	0	38
C10:1	0	36	36	0	0	36	0	36	0	36
C10:2	0	25	0	25	0	25	0	25	0	25
C14	0	38	0	38	0	38	0	38	0	38
C14:1	0	45	0	45	0	45	0	45	0	45
C16	0	44	0	44	0	44	0	44	0	44
C16OH	0	45	0	45	0	45	45	0	0	45
C18	0	35	0	35	0	35	0	35	0	35
C18:1	0	38	0	38	0	38	0	38	0	38
C18OH	0	36	0	36	0	36	35	1	0	36

Clinical Assessment codes: WNL (Within Normal Limits), ONL (Outside Normal Limits).

Newborn Screening Quality Assurance Program
Frequency Distribution of Participants' Clinical Assessments

Program: Acylcarnitines (ACPT)
International

	Specimen Number									
	20244006001		20244006002		20244006003		20244006004		20244006005	
Analyte	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL
C0(L)	1	250	1	250	158	93	1	250	1	250
C2(L)	2	201	2	201	143	60	2	201	3	200
C3	1	247	1	247	1	247	1	247	243	5
C3DC	59	4	1	62	0	63	0	63	1	62
C3DC+C4OH	104	1	0	105	0	105	0	105	0	105
C4	1	221	2	220	1	221	2	220	1	221
C4OH	9	50	1	58	0	59	0	59	0	59
C5	0	256	0	256	0	256	2	254	1	255
C5:1	2	216	1	217	2	216	1	217	0	218
C5DC	2	238	1	239	1	239	1	239	1	239
C5OH	4	206	3	207	0	210	3	207	4	206
C6	0	230	222	8	0	230	0	230	0	230
C8	0	258	254	4	1	257	0	258	0	258
C10	0	247	235	12	0	247	0	247	0	247
C10:1	0	216	208	8	0	216	0	216	0	216
C10:2	0	156	0	156	0	156	0	156	0	156
C14	1	233	1	233	2	232	1	233	1	233
C14:1	0	234	0	234	1	233	0	234	0	234
C16	1	236	2	235	1	236	1	236	3	234
C16OH	0	242	0	242	2	240	235	7	1	241
C18	1	224	1	224	2	223	1	224	2	223
C18:1	0	217	0	217	0	217	0	217	0	217
C18OH	0	195	0	195	0	195	178	17	3	192

Clinical Assessment codes: WNL (Within Normal Limits), ONL (Outside Normal Limits).

Newborn Screening Quality Assurance Program
Frequency Distribution of Participants' Clinical Assessments

Program: Amino Acids (AAPT)
Domestic

	Specimen Number									
	20244005001		20244005002		20244005003		20244005004		20244005005	
Analyte	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL
ARG	0	38	37	1	0	38	0	38	0	38
CIT	0	43	0	43	0	43	43	0	1	42
CRE	0	5	0	5	0	5	0	5	0	5
GAMTr	0	4	0	4	0	4	0	4	0	4
GUAC	0	6	0	6	0	6	0	6	0	6
LEU	0	44	0	44	0	44	0	44	43	1
MET	0	43	0	43	43	0	0	43	0	43
PHE	0	50	0	50	0	50	0	50	0	50
SUAC	0	42	0	42	0	42	0	42	0	42
TYR	1	47	1	47	1	47	1	47	1	47
VAL	0	29	0	29	0	29	0	29	28	1

Program: Amino Acids (AAPT)
International

	Specimen Number									
	20244005001		20244005002		20244005003		20244005004		20244005005	
Analyte	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL
ARG	1	204	199	6	1	204	1	204	3	202
CIT	0	227	1	226	0	227	223	4	0	227
CRE	0	7	0	7	0	7	0	7	0	7
GAMTr	0	3	0	3	0	3	0	3	0	3
GUAC	0	11	0	11	0	11	0	11	0	11
LEU	0	255	2	253	1	254	1	254	245	10
MET	3	246	2	247	246	3	3	246	3	246
PHE	3	301	1	303	2	302	1	303	3	301
SUAC	0	136	0	136	0	136	1	135	0	136
TYR	1	248	2	247	1	248	1	248	1	248
VAL	0	234	1	233	1	233	1	233	228	6

Clinical Assessment codes: WNL (Within Normal Limits), ONL (Outside Normal Limits).

Newborn Screening Quality Assurance Program
Frequency Distribution of Participants' Clinical Assessments

Program: Biotinidase (BIOTPT)
Domestic

	Specimen Number									
	20244007001		20244007002		20244007003		20244007004		20244007005	
Analyte	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL
BIOT	0	41	0	41	41	0	0	41	0	41

Program: Biotinidase (BIOTPT)
International

	Specimen Number									
	20244007001		20244007002		20244007003		20244007004		20244007005	
Analyte	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL
BIOT	0	175	0	175	174	1	1	174	0	175

Clinical Assessment codes: WNL (Within Normal Limits), ONL (Outside Normal Limits).

Newborn Screening Quality Assurance Program
Frequency Distribution of Participants' Clinical Assessments

Program: Galactose-1-phosphate Uridyltransferase (GALTPT)
Domestic

	Specimen Number									
	20244009001		20244009002		20244009003		20244009004		20244009005	
Analyte	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL
GALT	0	42	0	42	42	0	0	42	0	42

Program: Galactose-1-phosphate Uridyltransferase (GALTPT)

International

	Specimen Number									
	20244009001		20244009002		20244009003		20244009004		20244009005	
Analyte	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL
GALT	0	105	0	105	104	1	0	105	0	105

Clinical Assessment codes: WNL (Within Normal Limits), ONL (Outside Normal Limits).

Newborn Screening Quality Assurance Program
Frequency Distribution of Participants' Clinical Assessments

Program: Glucose-6-phosphate Dehydrogenase (G6PDPT)
Domestic

	Specimen Number									
	20244003001		20244003002		20244003003		20244003004		20244003005	
Analyte	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL
G6PD	0	2	0	2	2	0	0	2	0	2

Program: Glucose-6-phosphate Dehydrogenase (G6PDPT)
International

	Specimen Number									
	20244003001		20244003002		20244003003		20244003004		20244003005	
Analyte	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL
G6PD	0	95	0	95	92	3	0	95	4	91

Clinical Assessment codes: WNL (Within Normal Limits), ONL (Outside Normal Limits).

Newborn Screening Quality Assurance Program
Frequency Distribution of Participants' Clinical Assessments

Program: Hormones and Total Galactose (HORMPT)
Domestic

	Specimen Number									
	20244001001		20244001002		20244001003		20244001004		20244001005	
Analyte	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL
TGAL	0	20	0	20	0	20	20	0	0	20
T4	0	19	0	19	0	19	0	19	0	19
TSH	0	42	0	42	42	0	0	42	0	42
17OHP	41	0	1	40	0	41	1	40	0	41

Program: Hormones and Total Galactose (HORMPT)

International

	Specimen Number									
	20244001001		20244001002		20244001003		20244001004		20244001005	
Analyte	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL
TGAL	0	153	0	153	1	152	148	5	0	153
T4	0	44	0	44	8	36	0	44	0	44
TSH	0	281	1	280	281	0	0	281	0	281
17OHP	221	8	0	229	1	228	0	229	3	226

Clinical Assessment codes: WNL (Within Normal Limits), ONL (Outside Normal Limits).

Newborn Screening Quality Assurance Program
Frequency Distribution of Participants' Clinical Assessments

Program: Immunoreactive Trypsinogen (IRTPT)
Domestic

	Specimen Number									
	20244008001		20244008002		20244008003		20244008004		20244008005	
Analyte	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL
IRT	43	0	1	42	0	43	0	43	43	0

Program: Immunoreactive Trypsinogen (IRTPT)
International

	Specimen Number									
	20244008001		20244008002		20244008003		20244008004		20244008005	
Analyte	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL	ONL	WNL
IRT	189	0	0	189	0	189	0	189	184	5

Clinical Assessment codes: WNL (Within Normal Limits), ONL (Outside Normal Limits).

Analyte	Specimen Number	N	EV	Mean	SD	Min	Max	Comment
C0(L) (µmol/L blood)	20244006001	294	32.60	35.13	6.05	15.81	56.80	
	20244006002	296	32.88	34.05	5.85	15.06	56.41	
	20244006003	294	6.82	7.32	1.79	0.00	23.60	
	20244006004	294	32.88	33.37	6.01	14.11	60.00	
	20244006005	293	29.90	28.53	5.48	11.67	52.30	
C2(L) (µmol/L blood)	20244006001	222	22.87	18.32	3.60	10.48	39.00	
	20244006002	222	22.92	18.29	3.32	10.63	35.00	
	20244006003	222	4.09	3.55	2.49	0.75	32.26	
	20244006004	222	23.02	17.67	3.59	3.26	39.60	
	20244006005	222	27.91	20.87	4.26	11.37	42.30	
C3 (µmol/L blood)	20244006001	290	0.47	0.51	0.13	0.18	1.30	
	20244006002	290	0.47	0.51	0.15	0.05	1.50	
	20244006003	289	0.51	0.55	0.15	0.18	1.68	
	20244006004	290	0.47	0.50	0.15	0.20	1.70	
	20244006005	292	12.60	10.25	1.96	2.50	18.75	
C3DC (µmol/L blood)	20244006001	72	15.02	9.42	5.65	0.12	24.70	
	20244006002	72	0.03	0.05	0.05	0.00	0.22	
	20244006003	72	0.04	0.03	0.04	0.00	0.18	
	20244006004	72	0.02	0.03	0.03	0.00	0.15	
	20244006005	71	0.02	0.03	0.03	0.00	0.18	
C3DC+C4OH (µmol/L blood)	20244006001	136	15.04	2.83	1.07	0.69	5.52	
	20244006002	134	0.04	0.05	0.02	0.01	0.17	
	20244006003	134	0.03	0.03	0.01	0.01	0.08	
	20244006004	135	0.05	0.04	0.02	0.02	0.13	
	20244006005	135	0.04	0.04	0.02	0.01	0.15	

Analyte	Specimen Number	N	EV	Mean	SD	Min	Max	Comment
C4 (µmol/L blood)	20244006001	259	0.07	0.08	0.04	0.03	0.40	
	20244006002	258	0.07	0.08	0.05	0.01	0.40	
	20244006003	258	0.06	0.05	0.03	0.01	0.30	
	20244006004	257	0.07	0.07	0.05	0.03	0.45	
	20244006005	259	0.06	0.07	0.04	0.02	0.56	
C4OH (µmol/L blood)	20244006001	64	0.05	0.26	0.32	0.04	1.75	
	20244006002	65	0.07	0.06	0.07	0.02	0.56	
	20244006003	64	0.05	0.04	0.03	0.01	0.16	
	20244006004	66	0.05	0.06	0.05	0.01	0.24	
	20244006005	64	0.05	0.05	0.03	0.01	0.20	
C5 (µmol/L blood)	20244006001	299	0.04	0.05	0.03	0.02	0.32	
	20244006002	299	0.04	0.04	0.03	0.01	0.30	
	20244006003	299	0.04	0.04	0.03	0.01	0.23	
	20244006004	298	0.04	0.04	0.03	0.01	0.21	
	20244006005	297	0.04	0.05	0.03	0.02	0.23	
C5:1 (µmol/L blood)	20244006001	257	0.01	0.01	0.01	0.00	0.10	
	20244006002	257	0.01	0.01	0.01	0.00	0.07	
	20244006003	256	0.02	0.01	0.01	0.00	0.07	
	20244006004	256	0.01	0.01	0.01	0.00	0.09	
	20244006005	258	0.02	0.01	0.02	0.00	0.10	
C5DC (µmol/L blood)	20244006001	279	0.01	0.08	0.06	0.00	0.38	
	20244006002	278	0.01	0.04	0.03	0.00	0.23	
	20244006003	279	0.02	0.03	0.03	0.00	0.19	
	20244006004	278	0.01	0.04	0.03	0.00	0.19	
	20244006005	277	0.01	0.03	0.03	0.00	0.19	

Analyte	Specimen Number	N	EV	Mean	SD	Min	Max	Comment
C5OH (µmol/L blood)	20244006001	250	0.17	0.32	0.14	0.01	0.68	
	20244006002	252	0.19	0.32	0.14	0.00	0.71	
	20244006003	251	0.21	0.18	0.07	0.01	0.59	
	20244006004	252	0.17	0.31	0.16	0.01	1.40	
	20244006005	252	0.30	0.32	0.11	0.02	0.69	
C6 (µmol/L blood)	20244006001	265	0.01	0.01	0.02	0.00	0.12	
	20244006002	268	1.51	1.11	0.29	0.25	4.60	
	20244006003	265	0.02	0.02	0.01	0.00	0.10	
	20244006004	266	0.01	0.01	0.02	0.00	0.13	
	20244006005	266	0.02	0.02	0.02	0.00	0.20	
C8 (µmol/L blood)	20244006001	301	0.01	0.02	0.02	0.00	0.15	
	20244006002	303	2.01	1.55	0.45	0.11	6.90	
	20244006003	301	0.01	0.02	0.02	0.00	0.21	
	20244006004	298	0.01	0.02	0.02	0.00	0.19	
	20244006005	299	0.02	0.02	0.02	0.00	0.20	
C10 (µmol/L blood)	20244006001	282	0.01	0.02	0.02	0.00	0.32	
	20244006002	284	1.41	0.81	0.18	0.14	1.48	
	20244006003	280	0.02	0.02	0.02	0.00	0.12	
	20244006004	280	0.01	0.02	0.01	0.00	0.09	
	20244006005	283	0.01	0.02	0.02	0.00	0.17	
C10:1 (µmol/L blood)	20244006001	249	0.01	0.02	0.02	0.00	0.17	
	20244006002	250	1.11	0.77	0.29	0.07	2.53	
	20244006003	247	0.02	0.02	0.02	0.00	0.12	
	20244006004	248	0.02	0.02	0.02	0.00	0.10	
	20244006005	248	0.02	0.02	0.02	0.00	0.09	

Analyte	Specimen Number	N	EV	Mean	SD	Min	Max	Comment
C10:2 (µmol/L blood)	20244006001	179	0.00	0.01	0.02	0.00	0.17	
	20244006002	178	0.01	0.01	0.02	0.00	0.14	
	20244006003	178	0.01	0.01	0.02	0.00	0.10	
	20244006004	178	0.01	0.01	0.02	0.00	0.11	
	20244006005	177	0.01	0.01	0.01	0.00	0.09	
C14 (µmol/L blood)	20244006001	270	0.02	0.03	0.02	0.00	0.18	
	20244006002	269	0.03	0.03	0.03	0.01	0.21	
	20244006003	268	0.03	0.03	0.02	0.01	0.22	
	20244006004	269	0.03	0.03	0.02	0.00	0.18	
	20244006005	270	0.08	0.08	0.03	0.00	0.28	
C14:1 (µmol/L blood)	20244006001	275	0.01	0.02	0.02	0.00	0.18	
	20244006002	276	0.01	0.02	0.02	0.00	0.28	
	20244006003	277	0.01	0.02	0.02	0.00	0.20	
	20244006004	275	0.01	0.02	0.02	0.00	0.20	
	20244006005	277	0.01	0.03	0.03	0.00	0.23	
C16 (µmol/L blood)	20244006001	277	0.36	0.43	0.09	0.05	0.96	
	20244006002	279	0.37	0.43	0.13	0.20	1.59	
	20244006003	279	0.36	0.43	0.10	0.20	1.25	
	20244006004	281	0.38	0.44	0.36	0.13	5.50	
	20244006005	279	0.60	0.67	0.17	0.25	1.91	
C16OH (µmol/L blood)	20244006001	281	0.01	0.01	0.01	0.00	0.08	
	20244006002	282	0.01	0.01	0.01	0.00	0.07	
	20244006003	282	0.01	0.01	0.01	0.00	0.07	
	20244006004	282	1.71	1.12	0.29	0.02	2.05	
	20244006005	284	0.01	0.02	0.02	0.00	0.11	

Analyte	Specimen Number	N	EV	Mean	SD	Min	Max	Comment
C18 (µmol/L blood)	20244006001	255	0.25	0.30	0.07	0.01	0.72	
	20244006002	256	0.26	0.29	0.06	0.03	0.54	
	20244006003	257	0.29	0.35	0.07	0.16	0.75	
	20244006004	257	0.26	0.28	0.08	0.10	0.79	
	20244006005	258	0.53	0.58	0.14	0.24	1.20	
C18:1 (µmol/L blood)	20244006001	252	0.74	0.83	0.24	0.01	1.94	
	20244006002	252	0.77	0.82	0.22	0.01	1.88	
	20244006003	253	0.35	0.40	0.12	0.01	1.04	
	20244006004	252	0.76	0.80	0.22	0.01	1.85	
	20244006005	252	0.64	0.68	0.19	0.02	1.60	
C18OH (µmol/L blood)	20244006001	226	0.00	0.01	0.01	0.00	0.05	
	20244006002	228	0.01	0.01	0.01	0.00	0.06	
	20244006003	228	0.01	0.01	0.01	0.00	0.06	
	20244006004	222	2.01	1.23	0.53	0.44	6.30	
	20244006005	228	0.01	0.01	0.02	0.00	0.12	

Analyte	Specimen Number	N	EV	Mean	SD	Min	Max	Comment
Arg (µmol/L blood)	20244005001	238	7.7	7.9	2.7	0.0	22.0	
	20244005002	239	186.3	141.7	39.8	6.5	285.6	
	20244005003	238	6.4	6.5	3.6	1.3	30.0	
	20244005004	242	6.2	7.1	6.9	1.8	85.5	
	20244005005	241	8.0	10.0	3.0	2.7	25.0	
CRE	20244005001	12	328.6	291.2	45.5	171.4	366.5	
	20244005002	12	431.0	378.6	51.5	247.4	441.9	
	20244005003	12	425.0	392.0	62.2	223.1	459.2	
	20244005004	12	447.0	413.4	65.5	243.6	500.7	
	20244005005	12	322.0	299.1	46.3	194.9	383.6	
Cit (µmol/L blood)	20244005001	267	5.9	5.9	1.9	0.0	20.1	
	20244005002	265	10.6	12.1	2.9	3.1	25.3	
	20244005003	266	10.8	9.9	2.1	3.1	21.2	
	20244005004	268	162.6	143.4	23.8	48.4	237.8	
	20244005005	267	6.0	6.2	2.2	0.0	22.7	
GUAC (µmol/L blood)	20244005001	17	1.0	1.2	0.9	0.4	3.8	
	20244005002	17	1.1	1.2	0.8	0.5	3.8	
	20244005003	17	1.2	1.2	0.8	0.6	3.7	
	20244005004	17	1.4	1.5	0.9	0.7	4.0	
	20244005005	17	0.9	1.3	0.9	0.4	3.7	

Analyte	Specimen Number	N	EV	Mean	SD	Min	Max	Comment
GAMTr	20244005001	7	3.0	2.0	1.6	0.0	4.0	
	20244005002	7	2.6	1.6	1.3	0.0	3.2	
	20244005003	7	2.8	1.6	1.2	0.0	3.2	
	20244005004	7	3.1	1.9	1.5	0.0	3.6	
	20244005005	7	2.8	2.2	1.8	0.0	4.3	
Leu (µmol/L blood)	20244005001	293	22.5	29.0	13.6	5.9	106.0	
	20244005002	296	16.9	25.2	18.2	3.5	150.0	
	20244005003	292	18.4	22.9	10.4	4.2	102.3	
	20244005004	297	18.7	24.9	17.9	5.8	150.2	
	20244005005	296	571.4	487.7	75.3	263.9	778.8	
Met (µmol/L blood)	20244005001	289	1.7	2.8	4.2	0.0	41.5	
	20244005002	286	2.1	2.7	2.6	0.5	19.6	
	20244005003	289	172.1	127.8	21.8	34.7	206.2	
	20244005004	287	1.7	2.5	2.3	0.0	17.8	
	20244005005	288	1.8	2.4	2.6	0.0	23.9	
Phe (µmol/L blood)	20244005001	347	6.3	9.9	8.6	0.0	71.8	
	20244005002	347	5.6	8.9	8.2	0.0	62.7	
	20244005003	348	5.5	8.9	8.1	0.1	72.6	
	20244005004	347	5.4	9.2	9.4	0.1	79.7	
	20244005005	349	6.1	12.6	18.7	0.2	121.1	
SUAC (µmol/L blood)	20244005001	175	0.2	0.5	0.5	0.0	4.9	
	20244005002	176	0.2	0.5	0.6	0.0	6.0	
	20244005003	176	0.2	0.5	0.5	0.0	2.5	
	20244005004	176	0.3	0.6	0.5	0.0	4.4	
	20244005005	176	0.2	0.5	0.6	0.0	4.8	

Analyte	Specimen Number	N	EV	Mean	SD	Min	Max	Comment
Tyr (µmol/L blood)	20244005001	291	13.7	16.5	4.4	4.3	41.1	
	20244005002	291	10.3	12.7	4.7	3.1	56.4	
	20244005003	293	10.4	12.9	4.3	5.4	48.7	
	20244005004	292	9.7	12.4	4.9	2.5	52.7	
	20244005005	293	13.4	16.4	5.1	5.2	64.6	
Val (µmol/L blood)	20244005001	259	30.9	12.2	17.6	101.1	12.2	
	20244005002	260	23.7	13.1	13.1	127.3	13.1	
	20244005003	259	23.4	11.4	9.5	86.6	11.4	
	20244005004	260	21.2	11.4	11.1	82.1	11.4	
	20244005005	261	579.6	83.2	130.0	731.7	83.2	

Analyte	Specimen Number	N	EV	Mean	SD	Min	Max	Comment
T4 (µg/dL serum)	20244001001	62	15.4	16.6	2.3	11.5	25.7	
	20244001002	62	15.5	16.9	2.8	8.3	30.9	
	20244001003	62	8.2	8.3	1.4	3.0	12.4	
	20244001004	61	16.0	16.9	1.9	13.0	21.7	
	20244001005	62	15.4	16.9	2.6	12.0	28.6	
TSH (µIU/mL serum)	20244001001	310	1.4	1.5	1.2	0.0	7.8	
	20244001002	315	1.5	1.8	1.7	0.0	14.4	
	20244001003	321	91.6	79.4	20.4	18.5	126.5	
	20244001004	311	1.2	1.4	1.3	0.0	7.5	
	20244001005	311	1.4	1.5	1.5	0.0	8.8	
17OHP (ng/mL serum)	20244001001	259	86.3	93.4	21.6	18.5	180.0	
	20244001002	261	0.9	1.9	2.5	0.1	22.3	
	20244001003	256	0.9	1.0	1.1	0.1	8.7	
	20244001004	260	0.9	1.9	2.6	0.1	21.8	
	20244001005	260	0.4	1.2	2.6	0.0	25.6	
TGal (mg/dL blood)	20244001001	167	0.0	1.4	1.7	0.0	7.9	
	20244001002	167	0.0	1.4	1.6	0.0	8.5	
	20244001003	169	0.9	1.6	1.8	0.0	7.5	
	20244001004	170	25.0	22.2	5.9	0.2	49.4	
	20244001005	168	0.0	1.6	2.6	0.0	27.2	

Analyte	Specimen Number	N	EV	Mean	SD	Min	Max	Comment
IRT (ng/mL blood)	20244008001	231	249.6	239.7	50.5	66.8	377.2	
	20244008002	229	10.5	12.1	3.9	0.0	29.2	
	20244008003	223	5.5	7.1	3.3	0.0	19.4	
	20244008004	229	14.0	15.2	5.3	0.4	40.4	
	20244008005	230	133.8	138.4	31.5	14.9	279.5	

Newborn Screening Quality Assurance Program
Year: 2024, Quarter: 4
Mean Reported Concentrations Sorted by Method

Program: Acylcarnitines (ACPT)

		Specimen Number																			
		20244006001				20244006002				20244006003				20244006004				20244006005			
Analyte	Method	N	EV	Mean	SD	N	EV	Mean	SD	N	EV	Mean	SD	N	EV	Mean	SD	N	EV	Mean	SD
C0(L) (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	5	32.60	35.13	10.22	5	32.88	35.95	10.78	5	6.82	6.93	1.89	5	32.88	34.90	10.98	5	29.90	31.10	8.47
	Derivatized - MS/MS MassChrom® Chromsystems	19	32.60	30.52	6.88	19	32.88	30.78	7.89	18	6.82	7.26	4.38	19	32.88	30.82	8.40	19	29.90	27.53	7.65
	Derivatized - MS/MS non-kit	58	32.60	35.87	7.01	59	32.88	35.26	6.89	59	6.82	7.61	2.07	59	32.88	34.57	7.12	58	29.90	31.45	6.77
	Non-derivatized - MS/MS MS2 Screening Neo (MS-Neo)Siemens	5	32.60	37.13	4.26	5	32.88	35.79	2.59	5	6.82	7.68	0.83	5	32.88	35.57	3.99	5	29.90	31.24	3.24
	Non-derivatized - MS/MS MassChrom® Chromsystems	32	32.60	36.35	5.03	33	32.88	34.85	5.59	32	6.82	7.55	1.29	32	32.88	34.08	4.31	32	29.90	28.27	3.53
	Non-derivatized - MS/MS NeoBase 2 Revvity	109	32.60	35.58	5.20	109	32.88	34.34	4.54	109	6.82	7.38	1.02	109	32.88	33.56	4.56	109	29.90	28.08	4.27
	Non-derivatized - MS/MS NeoBase Revvity	31	32.60	36.33	6.10	31	32.88	34.27	5.83	31	6.82	7.31	1.32	31	32.88	33.99	5.62	31	29.90	28.74	4.08
	Non-derivatized - MS/MS non-kit	23	32.60	32.91	5.28	23	32.88	31.22	5.47	23	6.82	6.50	2.09	22	32.88	30.67	5.29	22	29.90	25.09	4.25
	Non-derivatized Labsystems Neomass AAAC Plus	8	32.60	30.67	3.81	8	32.88	30.29	3.18	8	6.82	6.24	0.82	8	32.88	27.31	2.62	8	29.90	23.32	2.88
	Other	9	32.60	34.14	3.83	9	32.88	32.72	4.46	9	6.82	6.94	0.75	9	32.88	30.99	4.43	9	29.90	26.75	4.05
C2(L) (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	5	22.87	21.10	2.52	5	22.92	23.01	3.58	5	4.09	4.23	0.53	5	23.02	21.38	1.32	5	27.91	24.47	2.36
	Derivatized - MS/MS MassChrom® Chromsystems	15	22.87	17.65	2.94	15	22.92	17.73	3.19	15	4.09	6.43	7.37	15	23.02	15.95	4.29	15	27.91	19.70	2.84
	Derivatized - MS/MS non-kit	48	22.87	20.53	4.51	48	22.92	20.03	4.04	48	4.09	5.00	2.35	48	23.02	19.53	4.98	48	27.91	23.95	6.05
	Non-derivatized - MS/MS MassChrom® Chromsystems	20	22.87	16.81	2.44	20	22.92	16.73	1.83	20	4.09	2.72	0.49	20	23.02	16.63	2.01	20	27.91	19.36	2.56
	Non-derivatized - MS/MS NeoBase 2 Revvity	77	22.87	16.92	1.92	77	22.92	17.14	1.83	77	4.09	2.72	0.36	77	23.02	16.59	1.88	77	27.91	19.32	2.40
	Non-derivatized - MS/MS NeoBase Revvity	26	22.87	18.48	2.11	26	22.92	18.21	2.21	26	4.09	2.90	0.30	26	23.02	18.04	2.07	26	27.91	20.93	2.15
	Non-derivatized - MS/MS non-kit	18	22.87	19.23	3.65	18	22.92	19.20	3.69	18	4.09	3.02	0.76	18	23.02	18.70	3.46	18	27.91	21.14	3.36
	Non-derivatized Labsystems Neomass AAAC Plus	7	22.87	15.23	2.09	7	22.92	15.46	2.40	7	4.09	2.62	0.54	7	23.02	14.10	1.83	7	27.91	17.17	1.95
	Other	7	22.87	19.27	1.41	7	22.92	19.30	2.01	7	4.09	3.00	0.43	7	23.02	17.96	1.52	7	27.91	20.78	1.85

Note: EV = Expected Value, SD = Standard Deviation. Methods N < 3 not shown.

Newborn Screening Quality Assurance Program
Year: 2024, Quarter: 4
Mean Reported Concentrations Sorted by Method

Program: Acylcarnitines (ACPT)

		Specimen Number																			
		20244006001				20244006002				20244006003				20244006004				20244006005			
Analyte	Method	N	EV	Mean	SD	N	EV	Mean	SD	N	EV	Mean	SD	N	EV	Mean	SD	N	EV	Mean	SD
C3 (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	4	0.47	0.72	0.39	5	0.47	0.84	0.43	4	0.51	0.63	0.13	5	0.47	0.81	0.51	5	12.60	9.54	2.54
	Derivatized - MS/MS MassChrom® Chromsystems	19	0.47	0.55	0.27	19	0.47	0.55	0.26	18	0.51	0.49	0.16	18	0.47	0.45	0.08	19	12.60	9.03	1.95
	Derivatized - MS/MS non-kit	58	0.47	0.54	0.13	57	0.47	0.55	0.20	59	0.51	0.61	0.24	58	0.47	0.55	0.21	58	12.60	10.28	2.23
	Non-derivatized - MS/MS MS2 Screening Neo (MS-Neo)Siemens	5	0.47	0.48	0.04	5	0.47	0.47	0.02	5	0.51	0.54	0.06	5	0.47	0.48	0.03	5	12.60	10.70	0.81
	Non-derivatized - MS/MS MassChrom® Chromsystems	29	0.47	0.42	0.08	29	0.47	0.41	0.08	28	0.51	0.47	0.09	29	0.47	0.42	0.07	30	12.60	8.96	1.94
	Non-derivatized - MS/MS NeoBase 2 Revvity	109	0.47	0.53	0.08	109	0.47	0.52	0.07	109	0.51	0.58	0.09	109	0.47	0.52	0.07	109	12.60	11.04	1.62
	Non-derivatized - MS/MS NeoBase Revvity	31	0.47	0.46	0.05	31	0.47	0.44	0.05	31	0.51	0.49	0.04	31	0.47	0.45	0.04	31	12.60	9.83	1.08
	Non-derivatized - MS/MS non-kit	23	0.47	0.53	0.12	23	0.47	0.51	0.09	23	0.51	0.55	0.10	23	0.47	0.49	0.11	23	12.60	10.40	2.04
	Non-derivatized Labsystems Neomass AAAC Plus	8	0.47	0.43	0.08	8	0.47	0.42	0.07	8	0.51	0.47	0.10	8	0.47	0.38	0.10	8	12.60	8.28	1.09
	Other	9	0.47	0.52	0.06	9	0.47	0.51	0.05	9	0.51	0.55	0.07	9	0.47	0.49	0.07	9	12.60	10.15	1.11
C3DC (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	5	15.02	9.83	8.36	5	0.03	0.07	0.06	5	0.04	0.06	0.07	5	0.02	0.05	0.05	5	0.02	0.05	0.07
	Derivatized - MS/MS MassChrom® Chromsystems	12	15.02	14.11	5.80	12	0.03	0.08	0.05	12	0.04	0.06	0.04	12	0.02	0.05	0.04	12	0.02	0.04	0.03
	Derivatized - MS/MS non-kit	52	15.02	8.53	4.81	52	0.03	0.05	0.05	52	0.04	0.03	0.03	52	0.02	0.03	0.03	51	0.02	0.02	0.02
	Other	4	15.02	6.99	5.09	4	0.03	0.04	0.02	4	0.04	0.01	0.01	4	0.02	0.03	0.02	4	0.02	0.02	0.01
C3DC+C4OH (µmol/L blood)	Non-derivatized - MS/MS MassChrom® Chromsystems	9	15.04	1.82	0.93	9	0.04	0.04	0.01	9	0.03	0.02	0.02	9	0.05	0.04	0.01	9	0.04	0.04	0.04
	Non-derivatized - MS/MS NeoBase 2 Revvity	85	15.04	3.24	0.91	85	0.04	0.04	0.02	85	0.03	0.02	0.01	85	0.05	0.04	0.01	85	0.04	0.03	0.01
	Non-derivatized - MS/MS NeoBase Revvity	21	15.04	2.29	0.49	21	0.04	0.04	0.02	21	0.03	0.02	0.01	21	0.05	0.04	0.01	21	0.04	0.03	0.01
	Non-derivatized - MS/MS non-kit	15	15.04	2.52	1.36	13	0.04	0.05	0.03	14	0.03	0.04	0.02	14	0.05	0.06	0.04	14	0.04	0.05	0.03
	Non-derivatized Labsystems Neomass AAAC Plus	5	15.04	1.35	1.06	5	0.04	0.04	0.04	5	0.03	0.04	0.03	5	0.05	0.05	0.04	5	0.04	0.05	0.03
	Other	5	15.04	1.91	0.83	5	0.04	0.06	0.05	4	0.03	0.03	0.01	5	0.05	0.05	0.04	5	0.04	0.05	0.05

Note: EV = Expected Value, SD = Standard Deviation. Methods N < 3 not shown.

Newborn Screening Quality Assurance Program
Year: 2024, Quarter: 4
Mean Reported Concentrations Sorted by Method

Program: Acylcarnitines (ACPT)

		Specimen Number																			
		20244006001				20244006002				20244006003				20244006004				20244006005			
Analyte	Method	N	EV	Mean	SD	N	EV	Mean	SD	N	EV	Mean	SD	N	EV	Mean	SD	N	EV	Mean	SD
C4 (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	5	0.07	0.14	0.15	5	0.07	0.08	0.04	5	0.06	0.11	0.11	5	0.07	0.15	0.15	5	0.06	0.09	0.04
	Derivatized - MS/MS MassChrom® Chromsystems	17	0.07	0.07	0.02	17	0.07	0.11	0.05	17	0.06	0.05	0.02	16	0.07	0.07	0.02	17	0.06	0.10	0.12
	Derivatized - MS/MS non-kit	56	0.07	0.09	0.04	54	0.07	0.12	0.06	55	0.06	0.07	0.05	54	0.07	0.08	0.04	56	0.06	0.08	0.05
	Non-derivatized - MS/MS MS2 Screening Neo (MS-Neo)Siemens	3	0.07	0.06	0.01	3	0.07	0.06	0.01	3	0.06	0.04	0.00	3	0.07	0.06	0.00	3	0.06	0.05	0.01
	Non-derivatized - MS/MS MassChrom® Chromsystems	21	0.07	0.08	0.07	21	0.07	0.08	0.07	20	0.06	0.06	0.02	21	0.07	0.08	0.06	20	0.06	0.07	0.02
	Non-derivatized - MS/MS NeoBase 2 Revvity	97	0.07	0.06	0.01	97	0.07	0.06	0.01	97	0.06	0.04	0.01	97	0.07	0.06	0.01	97	0.06	0.05	0.01
	Non-derivatized - MS/MS NeoBase Revvity	29	0.07	0.09	0.02	29	0.07	0.08	0.02	29	0.06	0.06	0.01	29	0.07	0.08	0.01	29	0.06	0.08	0.02
	Non-derivatized - MS/MS non-kit	20	0.07	0.08	0.03	21	0.07	0.09	0.07	21	0.06	0.06	0.04	21	0.07	0.09	0.08	21	0.06	0.07	0.06
	Non-derivatized Labsystems Neomass AAAC Plus	8	0.07	0.06	0.02	8	0.07	0.06	0.02	8	0.06	0.05	0.02	8	0.07	0.06	0.02	8	0.06	0.06	0.02
	Other	8	0.07	0.07	0.02	8	0.07	0.08	0.03	8	0.06	0.05	0.02	8	0.07	0.07	0.02	8	0.06	0.06	0.02
C4OH (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	3	0.05	0.44	0.58	3	0.07	0.07	0.03	3	0.05	0.07	0.08	3	0.05	0.08	0.08	.			
	Derivatized - MS/MS MassChrom® Chromsystems	11	0.05	0.25	0.11	10	0.07	0.07	0.04	11	0.05	0.04	0.04	11	0.05	0.07	0.06	10	0.05	0.06	0.04
	Derivatized - MS/MS non-kit	46	0.05	0.18	0.14	47	0.07	0.05	0.02	45	0.05	0.03	0.02	47	0.05	0.05	0.03	47	0.05	0.04	0.02
	Other	3	0.05	0.66	0.91	4	0.07	0.17	0.26	4	0.05	0.06	0.06	4	0.05	0.09	0.10	4	0.05	0.07	0.09
C5 (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	5	0.04	0.12	0.12	5	0.04	0.12	0.12	5	0.04	0.08	0.08	5	0.04	0.09	0.07	5	0.04	0.09	0.07
	Derivatized - MS/MS MassChrom® Chromsystems	19	0.04	0.08	0.06	19	0.04	0.06	0.03	19	0.04	0.06	0.04	19	0.04	0.06	0.04	18	0.04	0.06	0.04
	Derivatized - MS/MS non-kit	58	0.04	0.05	0.03	58	0.04	0.05	0.02	58	0.04	0.04	0.02	58	0.04	0.05	0.03	58	0.04	0.06	0.03
	LC-MS/MS non-kit	3	0.04	0.04	0.03	3	0.04	0.10	0.12	3	0.04	0.04	0.03	.				3	0.04	0.05	0.04
	Non-derivatized - MS/MS MS2 Screening Neo (MS-Neo)Siemens	5	0.04	0.03	0.01	5	0.04	0.03	0.01	5	0.04	0.03	0.01	5	0.04	0.03	0.01	5	0.04	0.04	0.00
	Non-derivatized - MS/MS MassChrom® Chromsystems	32	0.04	0.05	0.03	32	0.04	0.05	0.03	32	0.04	0.05	0.03	32	0.04	0.05	0.03	32	0.04	0.05	0.04
	Non-derivatized - MS/MS NeoBase 2 Revvity	110	0.04	0.04	0.02	110	0.04	0.04	0.02	110	0.04	0.03	0.02	110	0.04	0.04	0.02	110	0.04	0.04	0.02
	Non-derivatized - MS/MS NeoBase Revvity	31	0.04	0.04	0.02	31	0.04	0.03	0.02	31	0.04	0.03	0.01	31	0.04	0.04	0.01	30	0.04	0.04	0.01

Note: EV = Expected Value, SD = Standard Deviation. Methods N < 3 not shown.

Newborn Screening Quality Assurance Program
Year: 2024, Quarter: 4
Mean Reported Concentrations Sorted by Method

Program: Acylcarnitines (ACPT)

		Specimen Number																			
		20244006001				20244006002				20244006003				20244006004				20244006005			
Analyte	Method	N	EV	Mean	SD	N	EV	Mean	SD	N	EV	Mean	SD	N	EV	Mean	SD	N	EV	Mean	SD
C5 (µmol/L blood)	Non-derivatized - MS/MS non-kit	24	0.04	0.04	0.01	24	0.04	0.04	0.01	24	0.04	0.03	0.01	24	0.04	0.04	0.01	24	0.04	0.04	0.01
	Non-derivatized Labsystems Neomass AAAC Plus	8	0.04	0.06	0.02	8	0.04	0.07	0.02	8	0.04	0.05	0.01	8	0.04	0.05	0.02	8	0.04	0.07	0.02
	Other	9	0.04	0.04	0.01	9	0.04	0.04	0.01	9	0.04	0.03	0.01	9	0.04	0.04	0.01	9	0.04	0.04	0.02
C5:1 (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	5	0.01	0.02	0.01	5	0.01	0.03	0.03	5	0.02	0.02	0.02	5	0.01	0.03	0.03	5	0.02	0.04	0.03
	Derivatized - MS/MS MassChrom® Chromsystems	16	0.01	0.03	0.02	16	0.01	0.02	0.02	16	0.02	0.02	0.02	16	0.01	0.03	0.02	15	0.02	0.02	0.02
	Derivatized - MS/MS non-kit	52	0.01	0.02	0.02	52	0.01	0.02	0.01	52	0.02	0.02	0.01	52	0.01	0.02	0.01	53	0.02	0.02	0.01
	Non-derivatized - MS/MS MS2 Screening Neo (MS-Neo)Siemens	4	0.01	0.01	0.01	4	0.01	0.01	0.01	4	0.02	0.01	0.01	4	0.01	0.01	0.01	4	0.02	0.01	0.01
	Non-derivatized - MS/MS MassChrom® Chromsystems	22	0.01	0.02	0.01	22	0.01	0.02	0.01	21	0.02	0.01	0.01	22	0.01	0.02	0.01	23	0.02	0.02	0.02
	Non-derivatized - MS/MS NeoBase 2 Revvity	96	0.01	0.01	0.01	96	0.01	0.01	0.01	96	0.02	0.01	0.01	96	0.01	0.01	0.01	96	0.02	0.01	0.01
	Non-derivatized - MS/MS NeoBase Revvity	30	0.01	0.01	0.01	30	0.01	0.01	0.01	30	0.02	0.01	0.01	30	0.01	0.01	0.01	30	0.02	0.01	0.01
	Non-derivatized - MS/MS non-kit	21	0.01	0.01	0.01	21	0.01	0.01	0.01	21	0.02	0.01	0.01	20	0.01	0.01	0.01	21	0.02	0.01	0.01
	Non-derivatized Labsystems Neomass AAAC Plus	8	0.01	0.02	0.02	8	0.01	0.02	0.02	8	0.02	0.01	0.01	8	0.01	0.02	0.02	8	0.02	0.03	0.03
	Other	8	0.01	0.01	0.00	8	0.01	0.01	0.01	8	0.02	0.01	0.01	8	0.01	0.01	0.01	8	0.02	0.01	0.01
C5DC (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	5	0.01	0.09	0.16	5	0.01	0.03	0.03	5	0.02	0.03	0.04	5	0.01	0.03	0.03	4	0.01	0.02	0.01
	Derivatized - MS/MS MassChrom® Chromsystems	18	0.01	0.03	0.02	18	0.01	0.03	0.02	18	0.02	0.03	0.01	18	0.01	0.03	0.03	18	0.01	0.03	0.01
	Derivatized - MS/MS non-kit	60	0.01	0.03	0.04	60	0.01	0.03	0.03	60	0.02	0.02	0.02	60	0.01	0.02	0.03	59	0.01	0.02	0.02
	Non-derivatized - MS/MS MS2 Screening Neo (MS-Neo)Siemens	5	0.01	0.13	0.03	5	0.01	0.05	0.03	5	0.02	0.03	0.04	5	0.01	0.04	0.02	5	0.01	0.02	0.01
	Non-derivatized - MS/MS MassChrom® Chromsystems	29	0.01	0.16	0.08	29	0.01	0.08	0.04	30	0.02	0.07	0.04	29	0.01	0.08	0.05	30	0.01	0.06	0.04
	Non-derivatized - MS/MS NeoBase 2 Revvity	98	0.01	0.08	0.03	97	0.01	0.03	0.02	97	0.02	0.02	0.01	97	0.01	0.03	0.02	97	0.01	0.02	0.02
	Non-derivatized - MS/MS NeoBase Revvity	29	0.01	0.10	0.02	29	0.01	0.05	0.02	29	0.02	0.02	0.01	29	0.01	0.04	0.02	29	0.01	0.03	0.01
	Non-derivatized - MS/MS non-kit	22	0.01	0.13	0.06	22	0.01	0.05	0.04	22	0.02	0.03	0.03	22	0.01	0.04	0.03	22	0.01	0.03	0.02
	Non-derivatized Labsystems Neomass AAAC Plus	8	0.01	0.12	0.12	8	0.01	0.06	0.06	8	0.02	0.05	0.05	8	0.01	0.05	0.05	8	0.01	0.05	0.05

Note: EV = Expected Value, SD = Standard Deviation. Methods N < 3 not shown.

Newborn Screening Quality Assurance Program
Year: 2024, Quarter: 4
Mean Reported Concentrations Sorted by Method

Program: Acylcarnitines (ACPT)

		Specimen Number																			
		20244006001				20244006002				20244006003				20244006004				20244006005			
Analyte	**Method**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**
C5DC (µmol/L blood)	Other	8	0.01	0.09	0.05	8	0.01	0.04	0.02	8	0.02	0.03	0.02	8	0.01	0.04	0.02	8	0.01	0.02	0.02
C5OH (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	5	0.17	0.16	0.06	5	0.19	0.16	0.04	5	0.21	0.15	0.05	5	0.17	0.13	0.03	5	0.30	0.25	0.08
	Derivatized - MS/MS MassChrom® Chromsystems	16	0.17	0.20	0.10	16	0.19	0.21	0.12	16	0.21	0.18	0.08	16	0.17	0.17	0.10	16	0.30	0.29	0.09
	Derivatized - MS/MS non-kit	59	0.17	0.18	0.07	59	0.19	0.18	0.09	58	0.21	0.15	0.05	58	0.17	0.17	0.08	59	0.30	0.28	0.11
	Non-derivatized - MS/MS MS2 Screening Neo (MS-Neo)Siemens	5	0.17	0.43	0.01	5	0.19	0.45	0.02	5	0.21	0.25	0.03	5	0.17	0.42	0.02	5	0.30	0.45	0.03
	Non-derivatized - MS/MS MassChrom® Chromsystems	17	0.17	0.29	0.10	18	0.19	0.29	0.11	18	0.21	0.17	0.12	18	0.17	0.29	0.10	18	0.30	0.27	0.11
	Non-derivatized - MS/MS NeoBase 2 Revvity	91	0.17	0.42	0.11	92	0.19	0.43	0.11	92	0.21	0.20	0.07	92	0.17	0.42	0.11	92	0.30	0.37	0.09
	Non-derivatized - MS/MS NeoBase Revvity	29	0.17	0.33	0.08	29	0.19	0.33	0.08	29	0.21	0.17	0.05	29	0.17	0.32	0.06	29	0.30	0.31	0.07
	Non-derivatized - MS/MS non-kit	18	0.17	0.39	0.07	18	0.19	0.40	0.08	18	0.21	0.19	0.04	19	0.17	0.40	0.26	18	0.30	0.36	0.08
	Non-derivatized Labsystems Neomass AAAC Plus	7	0.17	0.21	0.10	7	0.19	0.24	0.09	7	0.21	0.13	0.04	7	0.17	0.21	0.09	7	0.30	0.21	0.09
	Other	7	0.17	0.36	0.14	7	0.19	0.36	0.14	7	0.21	0.23	0.06	7	0.17	0.33	0.14	7	0.30	0.36	0.09
C6 (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	5	0.01	0.02	0.02	5	1.51	1.20	0.31	5	0.02	0.02	0.02	5	0.01	0.01	0.00	5	0.02	0.02	0.01
	Derivatized - MS/MS MassChrom® Chromsystems	16	0.01	0.03	0.02	18	1.51	1.05	0.23	17	0.02	0.04	0.03	18	0.01	0.04	0.02	17	0.02	0.04	0.04
	Derivatized - MS/MS non-kit	56	0.01	0.02	0.02	56	1.51	1.15	0.53	56	0.02	0.02	0.01	56	0.01	0.02	0.02	56	0.02	0.03	0.02
	Non-derivatized - MS/MS MS2 Screening Neo (MS-Neo)Siemens	3	0.01	0.00	0.00	3	1.51	1.17	0.06	3	0.02	0.01	0.01	3	0.01	0.00	0.01	3	0.02	0.01	0.01
	Non-derivatized - MS/MS MassChrom® Chromsystems	24	0.01	0.02	0.03	24	1.51	1.05	0.22	23	0.02	0.02	0.02	23	0.01	0.01	0.02	24	0.02	0.03	0.04
	Non-derivatized - MS/MS NeoBase 2 Revvity	100	0.01	0.01	0.01	101	1.51	1.10	0.10	100	0.02	0.01	0.01	100	0.01	0.01	0.01	100	0.02	0.01	0.01
	Non-derivatized - MS/MS NeoBase Revvity	29	0.01	0.01	0.02	29	1.51	1.13	0.12	29	0.02	0.01	0.01	29	0.01	0.01	0.01	29	0.02	0.01	0.01
	Non-derivatized - MS/MS non-kit	22	0.01	0.01	0.02	22	1.51	1.14	0.21	22	0.02	0.02	0.02	22	0.01	0.01	0.02	22	0.02	0.02	0.02
	Non-derivatized Labsystems Neomass AAAC Plus	8	0.01	0.02	0.02	8	1.51	1.21	0.48	8	0.02	0.01	0.01	8	0.01	0.02	0.02	8	0.02	0.02	0.01
	Other	8	0.01	0.02	0.03	8	1.51	1.07	0.10	8	0.02	0.02	0.01	8	0.01	0.02	0.01	8	0.02	0.02	0.01

Note: EV = Expected Value, SD = Standard Deviation. Methods N < 3 not shown.

Newborn Screening Quality Assurance Program
Year: 2024, Quarter: 4
Mean Reported Concentrations Sorted by Method

Program: Acylcarnitines (ACPT)

		Specimen Number																			
		20244006001				20244006002				20244006003				20244006004				20244006005			
Analyte	Method	N	EV	Mean	SD	N	EV	Mean	SD	N	EV	Mean	SD	N	EV	Mean	SD	N	EV	Mean	SD
C8 (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	5	0.01	0.03	0.03	5	2.01	1.28	0.59	5	0.01	0.02	0.03	5	0.01	0.01	0.02	5	0.02	0.03	0.03
	Derivatized - MS/MS MassChrom® Chromsystems	19	0.01	0.02	0.01	19	2.01	1.14	0.30	19	0.01	0.03	0.05	19	0.01	0.03	0.04	18	0.02	0.02	0.01
	Derivatized - MS/MS non-kit	59	0.01	0.02	0.02	59	2.01	1.78	0.81	59	0.01	0.02	0.02	58	0.01	0.02	0.02	58	0.02	0.02	0.02
	LC-MS/MS non-kit	3	0.01	0.02	0.01	3	2.01	1.85	0.10	3	0.01	0.02	0.01	.				3	0.02	0.03	0.02
	Non-derivatized - MS/MS MS2 Screening Neo (MS-Neo)Siemens	5	0.01	0.01	0.01	5	2.01	1.59	0.15	5	0.01	0.02	0.01	5	0.01	0.01	0.01	5	0.02	0.02	0.01
	Non-derivatized - MS/MS MassChrom® Chromsystems	33	0.01	0.03	0.03	33	2.01	1.41	0.28	33	0.01	0.04	0.03	32	0.01	0.02	0.02	33	0.02	0.04	0.03
	Non-derivatized - MS/MS NeoBase 2 Revvity	111	0.01	0.01	0.01	112	2.01	1.49	0.18	111	0.01	0.01	0.01	111	0.01	0.01	0.01	111	0.02	0.02	0.01
	Non-derivatized - MS/MS NeoBase Revvity	31	0.01	0.01	0.00	31	2.01	1.62	0.18	31	0.01	0.01	0.01	31	0.01	0.01	0.00	31	0.02	0.02	0.01
	Non-derivatized - MS/MS non-kit	23	0.01	0.02	0.02	24	2.01	1.68	0.33	23	0.01	0.02	0.02	23	0.01	0.02	0.01	23	0.02	0.02	0.02
	Non-derivatized Labsystems Neomass AAAC Plus	8	0.01	0.02	0.01	8	2.01	1.62	0.42	8	0.01	0.03	0.02	8	0.01	0.02	0.01	8	0.02	0.03	0.02
	Other	9	0.01	0.03	0.04	9	2.01	1.58	0.18	9	0.01	0.02	0.01	9	0.01	0.02	0.02	9	0.02	0.02	0.03
C10 (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	5	0.01	0.02	0.01	5	1.41	0.77	0.10	5	0.02	0.01	0.00	4	0.01	0.01	0.01	5	0.01	0.02	0.01
	Derivatized - MS/MS MassChrom® Chromsystems	17	0.01	0.02	0.01	18	1.41	0.53	0.15	17	0.02	0.02	0.01	18	0.01	0.02	0.01	18	0.01	0.03	0.04
	Derivatized - MS/MS non-kit	55	0.01	0.02	0.04	54	1.41	0.88	0.26	55	0.02	0.02	0.03	55	0.01	0.02	0.02	55	0.01	0.03	0.03
	Non-derivatized - MS/MS MS2 Screening Neo (MS-Neo)Siemens	5	0.01	0.01	0.01	5	1.41	0.82	0.07	5	0.02	0.01	0.01	5	0.01	0.01	0.01	5	0.01	0.01	0.01
	Non-derivatized - MS/MS MassChrom® Chromsystems	29	0.01	0.02	0.01	30	1.41	0.79	0.19	29	0.02	0.02	0.01	29	0.01	0.02	0.01	29	0.01	0.02	0.01
	Non-derivatized - MS/MS NeoBase 2 Revvity	105	0.01	0.01	0.01	105	1.41	0.80	0.10	104	0.02	0.01	0.01	105	0.01	0.01	0.01	105	0.01	0.02	0.01
	Non-derivatized - MS/MS NeoBase Revvity	30	0.01	0.01	0.01	30	1.41	0.83	0.09	30	0.02	0.01	0.01	30	0.01	0.01	0.01	30	0.01	0.02	0.01
	Non-derivatized - MS/MS non-kit	23	0.01	0.03	0.04	24	1.41	0.90	0.17	22	0.02	0.02	0.02	22	0.01	0.02	0.02	23	0.01	0.03	0.04
	Non-derivatized Labsystems Neomass AAAC Plus	8	0.01	0.02	0.01	8	1.41	0.71	0.16	8	0.02	0.03	0.03	8	0.01	0.02	0.01	8	0.01	0.02	0.01
	Other	8	0.01	0.03	0.02	8	1.41	0.78	0.11	8	0.02	0.02	0.01	8	0.01	0.02	0.01	8	0.01	0.02	0.01

Note: EV = Expected Value, SD = Standard Deviation. Methods N < 3 not shown.

Newborn Screening Quality Assurance Program
Year: 2024, Quarter: 4
Mean Reported Concentrations Sorted by Method

Program: Acylcarnitines (ACPT)

		Specimen Number																			
		20244006001				20244006002				20244006003				20244006004				20244006005			
Analyte	Method	N	EV	Mean	SD	N	EV	Mean	SD	N	EV	Mean	SD	N	EV	Mean	SD	N	EV	Mean	SD
C10:1 (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	4	0.01	0.01	0.01	4	1.11	0.91	0.46	4	0.02	0.02	0.01	4	0.02	0.02	0.01	4	0.02	0.03	0.04
	Derivatized - MS/MS MassChrom® Chromsystems	16	0.01	0.03	0.02	16	1.11	0.62	0.21	15	0.02	0.02	0.02	15	0.02	0.03	0.02	15	0.02	0.02	0.02
	Derivatized - MS/MS non-kit	52	0.01	0.03	0.03	52	1.11	1.04	0.43	52	0.02	0.02	0.02	53	0.02	0.02	0.02	52	0.02	0.03	0.02
	Non-derivatized - MS/MS MassChrom® Chromsystems	20	0.01	0.01	0.01	21	1.11	0.69	0.22	20	0.02	0.01	0.02	20	0.02	0.01	0.02	20	0.02	0.02	0.02
	Non-derivatized - MS/MS NeoBase 2 Revvity	96	0.01	0.01	0.01	97	1.11	0.65	0.11	96	0.02	0.01	0.01	96	0.02	0.01	0.01	97	0.02	0.01	0.01
	Non-derivatized - MS/MS NeoBase Revvity	29	0.01	0.02	0.03	29	1.11	0.74	0.09	28	0.02	0.03	0.02	28	0.02	0.02	0.01	28	0.02	0.02	0.01
	Non-derivatized - MS/MS non-kit	21	0.01	0.01	0.01	20	1.11	0.78	0.24	21	0.02	0.01	0.02	21	0.02	0.01	0.01	21	0.02	0.01	0.01
	Non-derivatized Labsystems Neomass AAAC Plus	7	0.01	0.01	0.01	7	1.11	0.71	0.16	7	0.02	0.03	0.03	7	0.02	0.02	0.02	7	0.02	0.02	0.01
	Other	7	0.01	0.02	0.04	7	1.11	0.95	0.25	7	0.02	0.01	0.01	7	0.02	0.01	0.01	7	0.02	0.01	0.01
C10:2 (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	4	0.00	0.02	0.02	4	0.01	0.03	0.04	4	0.01	0.02	0.02	4	0.01	0.01	0.01	4	0.01	0.02	0.01
	Derivatized - MS/MS MassChrom® Chromsystems	10	0.00	0.02	0.02	10	0.01	0.02	0.01	10	0.01	0.02	0.02	10	0.01	0.02	0.01	10	0.01	0.02	0.02
	Derivatized - MS/MS non-kit	33	0.00	0.02	0.02	33	0.01	0.02	0.02	33	0.01	0.02	0.02	33	0.01	0.02	0.02	33	0.01	0.02	0.02
	Non-derivatized - MS/MS MassChrom® Chromsystems	9	0.00	0.02	0.02	9	0.01	0.02	0.02	9	0.01	0.02	0.02	9	0.01	0.02	0.02	9	0.01	0.02	0.01
	Non-derivatized - MS/MS NeoBase 2 Revvity	81	0.00	0.00	0.01	81	0.01	0.00	0.01	81	0.01	0.00	0.01	81	0.01	0.00	0.01	81	0.01	0.00	0.01
	Non-derivatized - MS/MS NeoBase Revvity	20	0.00	0.00	0.01	20	0.01	0.01	0.01	20	0.01	0.01	0.01	20	0.01	0.00	0.01	20	0.01	0.00	0.01
	Non-derivatized - MS/MS non-kit	13	0.00	0.03	0.05	12	0.01	0.01	0.03	12	0.01	0.01	0.03	12	0.01	0.01	0.03	11	0.01	0.01	0.01
	Non-derivatized Labsystems Neomass AAAC Plus	7	0.00	0.03	0.03	7	0.01	0.03	0.05	7	0.01	0.03	0.03	7	0.01	0.03	0.04	7	0.01	0.03	0.03
	Other	7	0.00	0.00	0.01	7	0.01	0.00	0.01	7	0.01	0.00	0.01	7	0.01	0.00	0.01	7	0.01	0.00	0.01

Note: EV = Expected Value, SD = Standard Deviation. Methods N < 3 not shown.

Newborn Screening Quality Assurance Program
Year: 2024, Quarter: 4
Mean Reported Concentrations Sorted by Method

Program: Acylcarnitines (ACPT)

		Specimen Number																			
		20244006001				20244006002				20244006003				20244006004				20244006005			
Analyte	**Method**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**
C14 (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	5	0.02	0.03	0.02	5	0.03	0.03	0.02	4	0.03	0.03	0.01	5	0.03	0.05	0.05	5	0.08	0.10	0.04
	Derivatized - MS/MS MassChrom® Chromsystems	18	0.02	0.04	0.02	18	0.03	0.03	0.01	19	0.03	0.04	0.01	19	0.03	0.04	0.04	19	0.08	0.09	0.05
	Derivatized - MS/MS non-kit	56	0.02	0.04	0.02	55	0.03	0.04	0.03	55	0.03	0.04	0.04	55	0.03	0.04	0.03	56	0.08	0.09	0.04
	Non-derivatized - MS/MS MS2 Screening Neo (MS-Neo)Siemens	4	0.02	0.03	0.01	4	0.03	0.02	0.01	4	0.03	0.02	0.00	4	0.03	0.02	0.01	4	0.08	0.07	0.01
	Non-derivatized - MS/MS MassChrom® Chromsystems	23	0.02	0.02	0.01	23	0.03	0.02	0.01	23	0.03	0.02	0.01	23	0.03	0.02	0.01	23	0.08	0.07	0.01
	Non-derivatized - MS/MS NeoBase 2 Revvity	100	0.02	0.02	0.01	100	0.03	0.02	0.00	99	0.03	0.02	0.00	100	0.03	0.02	0.01	99	0.08	0.07	0.01
	Non-derivatized - MS/MS NeoBase Revvity	29	0.02	0.02	0.01	29	0.03	0.02	0.00	29	0.03	0.02	0.00	29	0.03	0.02	0.00	29	0.08	0.07	0.01
	Non-derivatized - MS/MS non-kit	23	0.02	0.04	0.04	23	0.03	0.04	0.04	23	0.03	0.04	0.04	23	0.03	0.04	0.04	23	0.08	0.10	0.05
	Non-derivatized Labsystems Neomass AAAC Plus	8	0.02	0.02	0.01	8	0.03	0.02	0.01	8	0.03	0.02	0.01	8	0.03	0.02	0.02	8	0.08	0.06	0.03
	Other	9	0.02	0.03	0.01	9	0.03	0.03	0.01	9	0.03	0.03	0.01	9	0.03	0.03	0.01	9	0.08	0.08	0.01
C14:1 (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	5	0.01	0.03	0.03	5	0.01	0.04	0.06	5	0.01	0.06	0.08	5	0.01	0.04	0.05	5	0.01	0.07	0.10
	Derivatized - MS/MS MassChrom® Chromsystems	15	0.01	0.03	0.02	15	0.01	0.03	0.02	15	0.01	0.02	0.02	14	0.01	0.02	0.02	15	0.01	0.03	0.02
	Derivatized - MS/MS non-kit	56	0.01	0.03	0.03	56	0.01	0.03	0.04	57	0.01	0.03	0.04	56	0.01	0.03	0.03	57	0.01	0.03	0.03
	Non-derivatized - MS/MS MS2 Screening Neo (MS-Neo)Siemens	5	0.01	0.01	0.01	5	0.01	0.01	0.01	5	0.01	0.01	0.01	5	0.01	0.01	0.01	5	0.01	0.02	0.01
	Non-derivatized - MS/MS MassChrom® Chromsystems	22	0.01	0.02	0.03	22	0.01	0.02	0.01	22	0.01	0.02	0.02	22	0.01	0.02	0.01	22	0.01	0.03	0.02
	Non-derivatized - MS/MS NeoBase 2 Revvity	108	0.01	0.01	0.01	108	0.01	0.01	0.01	109	0.01	0.01	0.01	109	0.01	0.01	0.01	109	0.01	0.02	0.01
	Non-derivatized - MS/MS NeoBase Revvity	31	0.01	0.02	0.02	31	0.01	0.02	0.02	31	0.01	0.02	0.01	31	0.01	0.02	0.02	31	0.01	0.03	0.02
	Non-derivatized - MS/MS non-kit	21	0.01	0.02	0.01	21	0.01	0.02	0.01	21	0.01	0.02	0.02	21	0.01	0.02	0.02	21	0.01	0.02	0.01
	Non-derivatized Labsystems Neomass AAAC Plus	8	0.01	0.03	0.03	8	0.01	0.03	0.03	8	0.01	0.04	0.03	8	0.01	0.04	0.03	8	0.01	0.05	0.04
	Other	9	0.01	0.02	0.01	9	0.01	0.02	0.01	9	0.01	0.02	0.01	9	0.01	0.02	0.01	9	0.01	0.02	0.01

Note: EV = Expected Value, SD = Standard Deviation. Methods N < 3 not shown.

Newborn Screening Quality Assurance Program
Year: 2024, Quarter: 4
Mean Reported Concentrations Sorted by Method

Program: Acylcarnitines (ACPT)

		Specimen Number																			
		20244006001				20244006002				20244006003				20244006004				20244006005			
Analyte	**Method**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**
C16 (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	4	0.36	0.43	0.05	5	0.37	0.46	0.04	5	0.36	0.43	0.05	5	0.38	0.65	0.48	5	0.60	0.72	0.21
	Derivatized - MS/MS MassChrom® Chromsystems	18	0.36	0.38	0.08	18	0.37	0.38	0.08	18	0.36	0.36	0.09	19	0.38	0.35	0.09	19	0.60	0.57	0.15
	Derivatized - MS/MS non-kit	58	0.36	0.45	0.11	58	0.37	0.42	0.09	58	0.36	0.43	0.09	58	0.38	0.41	0.11	58	0.60	0.67	0.18
	Non-derivatized - MS/MS MS2 Screening Neo (MS-Neo)Siemens	4	0.36	0.39	0.04	4	0.37	0.39	0.01	4	0.36	0.39	0.03	4	0.38	0.39	0.04	4	0.60	0.57	0.07
	Non-derivatized - MS/MS MassChrom® Chromsystems	23	0.36	0.37	0.07	23	0.37	0.36	0.07	23	0.36	0.38	0.06	24	0.38	0.56	1.05	23	0.60	0.57	0.08
	Non-derivatized - MS/MS NeoBase 2 Revvity	106	0.36	0.47	0.07	106	0.37	0.46	0.07	106	0.36	0.47	0.08	106	0.38	0.45	0.07	106	0.60	0.73	0.12
	Non-derivatized - MS/MS NeoBase Revvity	30	0.36	0.39	0.08	30	0.37	0.39	0.05	30	0.36	0.39	0.06	30	0.38	0.38	0.05	30	0.60	0.62	0.11
	Non-derivatized - MS/MS non-kit	22	0.36	0.43	0.08	23	0.37	0.45	0.25	23	0.36	0.43	0.19	23	0.38	0.44	0.29	22	0.60	0.61	0.11
	Non-derivatized Labsystems Neomass AAAC Plus	8	0.36	0.36	0.06	8	0.37	0.36	0.05	8	0.36	0.38	0.07	8	0.38	0.33	0.06	8	0.60	0.56	0.22
	Other	9	0.36	0.43	0.03	9	0.37	0.41	0.04	9	0.36	0.40	0.04	9	0.38	0.39	0.05	9	0.60	0.63	0.13
C16OH (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	5	0.01	0.01	0.01	5	0.01	0.01	0.00	4	0.01	0.01	0.01	5	1.71	1.19	0.36	5	0.01	0.01	0.00
	Derivatized - MS/MS MassChrom® Chromsystems	16	0.01	0.02	0.02	16	0.01	0.02	0.01	16	0.01	0.01	0.01	16	1.71	1.05	0.47	16	0.01	0.03	0.03
	Derivatized - MS/MS non-kit	57	0.01	0.01	0.02	56	0.01	0.01	0.01	57	0.01	0.01	0.01	56	1.71	1.20	0.30	58	0.01	0.02	0.02
	Non-derivatized - MS/MS MS2 Screening Neo (MS-Neo)Siemens	5	0.01	0.00	0.00	5	0.01	0.00	0.00	5	0.01	0.00	0.00	5	1.71	1.09	0.18	5	0.01	0.01	0.00
	Non-derivatized - MS/MS MassChrom® Chromsystems	30	0.01	0.01	0.01	30	0.01	0.01	0.01	30	0.01	0.01	0.01	30	1.71	1.07	0.39	30	0.01	0.01	0.01
	Non-derivatized - MS/MS NeoBase 2 Revvity	106	0.01	0.01	0.01	106	0.01	0.01	0.01	106	0.01	0.01	0.01	107	1.71	1.14	0.21	106	0.01	0.01	0.01
	Non-derivatized - MS/MS NeoBase Revvity	31	0.01	0.01	0.01	31	0.01	0.01	0.01	31	0.01	0.01	0.01	31	1.71	0.97	0.22	31	0.01	0.01	0.01
	Non-derivatized - MS/MS non-kit	20	0.01	0.01	0.01	21	0.01	0.01	0.01	21	0.01	0.01	0.01	20	1.71	1.17	0.30	21	0.01	0.02	0.01
	Non-derivatized Labsystems Neomass AAAC Plus	7	0.01	0.01	0.01	8	0.01	0.01	0.01	8	0.01	0.01	0.01	8	1.71	0.80	0.15	8	0.01	0.01	0.01
	Other	9	0.01	0.01	0.01	9	0.01	0.01	0.01	9	0.01	0.01	0.01	9	1.71	1.15	0.32	9	0.01	0.01	0.01

Note: EV = Expected Value, SD = Standard Deviation. Methods N < 3 not shown.

Newborn Screening Quality Assurance Program
Year: 2024, Quarter: 4
Mean Reported Concentrations Sorted by Method

Program: Acylcarnitines (ACPT)

		Specimen Number																			
		20244006001				20244006002				20244006003				20244006004				20244006005			
Analyte	**Method**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**
C18 (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	4	0.25	0.27	0.05	5	0.26	0.31	0.07	4	0.29	0.33	0.06	5	0.26	0.35	0.19	5	0.53	0.67	0.27
	Derivatized - MS/MS MassChrom® Chromsystems	19	0.25	0.31	0.12	18	0.26	0.32	0.10	18	0.29	0.33	0.07	18	0.26	0.29	0.07	18	0.53	0.57	0.14
	Derivatized - MS/MS non-kit	51	0.25	0.32	0.11	52	0.26	0.28	0.08	52	0.29	0.33	0.08	52	0.26	0.28	0.10	52	0.53	0.55	0.17
	Non-derivatized - MS/MS MS2 Screening Neo (MS-Neo)Siemens	3	0.25	0.26	0.04	3	0.26	0.26	0.02	3	0.29	0.30	0.02	3	0.26	0.27	0.03	3	0.53	0.45	0.08
	Non-derivatized - MS/MS MassChrom® Chromsystems	22	0.25	0.28	0.05	22	0.26	0.28	0.05	23	0.29	0.38	0.11	23	0.26	0.30	0.12	23	0.53	0.61	0.11
	Non-derivatized - MS/MS NeoBase 2 Revvity	96	0.25	0.29	0.04	96	0.26	0.29	0.04	96	0.29	0.36	0.06	96	0.26	0.28	0.04	96	0.53	0.59	0.11
	Non-derivatized - MS/MS NeoBase Revvity	29	0.25	0.28	0.03	29	0.26	0.27	0.03	29	0.29	0.33	0.04	29	0.26	0.27	0.03	29	0.53	0.56	0.09
	Non-derivatized - MS/MS non-kit	21	0.25	0.32	0.07	21	0.26	0.29	0.05	22	0.29	0.39	0.11	22	0.26	0.31	0.12	22	0.53	0.62	0.18
	Non-derivatized Labsystems Neomass AAAC Plus	8	0.25	0.26	0.05	8	0.26	0.26	0.05	8	0.29	0.32	0.07	8	0.26	0.23	0.05	8	0.53	0.54	0.29
	Other	8	0.25	0.29	0.02	8	0.26	0.28	0.03	8	0.29	0.32	0.02	8	0.26	0.27	0.03	8	0.53	0.55	0.09
C18:1 (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	5	0.74	1.07	0.52	5	0.77	1.00	0.50	5	0.35	0.55	0.23	5	0.76	1.00	0.41	4	0.64	0.62	0.14
	Derivatized - MS/MS MassChrom® Chromsystems	16	0.74	0.93	0.52	16	0.77	0.96	0.48	16	0.35	0.43	0.21	16	0.76	0.89	0.46	16	0.64	0.75	0.34
	Derivatized - MS/MS non-kit	52	0.74	0.80	0.23	52	0.77	0.77	0.18	52	0.35	0.39	0.13	52	0.76	0.76	0.21	52	0.64	0.68	0.23
	Non-derivatized - MS/MS MS2 Screening Neo (MS-Neo)Siemens	3	0.74	0.80	0.14	3	0.77	0.78	0.08	3	0.35	0.36	0.02	3	0.76	0.79	0.12	3	0.64	0.58	0.10
	Non-derivatized - MS/MS MassChrom® Chromsystems	20	0.74	0.69	0.34	20	0.77	0.72	0.26	20	0.35	0.33	0.14	20	0.76	0.69	0.29	21	0.64	0.64	0.26
	Non-derivatized - MS/MS NeoBase 2 Revvity	95	0.74	0.84	0.12	95	0.77	0.83	0.11	95	0.35	0.41	0.05	95	0.76	0.82	0.12	95	0.64	0.71	0.11
	Non-derivatized - MS/MS NeoBase Revvity	29	0.74	0.82	0.14	29	0.77	0.79	0.12	29	0.35	0.39	0.06	29	0.76	0.80	0.14	29	0.64	0.68	0.10
	Non-derivatized - MS/MS non-kit	21	0.74	0.89	0.20	21	0.77	0.86	0.20	22	0.35	0.44	0.16	21	0.76	0.85	0.22	21	0.64	0.70	0.16
	Non-derivatized Labsystems Neomass AAAC Plus	8	0.74	0.60	0.14	8	0.77	0.61	0.13	8	0.35	0.29	0.06	8	0.76	0.54	0.12	8	0.64	0.47	0.13
	Other	8	0.74	0.92	0.31	8	0.77	0.88	0.27	8	0.35	0.42	0.12	8	0.76	0.85	0.25	8	0.64	0.71	0.18

Note: EV = Expected Value, SD = Standard Deviation. Methods N < 3 not shown.

Newborn Screening Quality Assurance Program
Year: 2024, Quarter: 4
Mean Reported Concentrations Sorted by Method

Program: Acylcarnitines (ACPT)

		Specimen Number																			
		20244006001				20244006002				20244006003				20244006004				20244006005			
Analyte	**Method**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**
C18OH (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	4	0.00	0.01	0.01	5	0.01	0.01	0.01	5	0.01	0.01	0.02	4	2.01	1.30	0.31	5	0.01	0.02	0.02
	Derivatized - MS/MS MassChrom® Chromsystems	16	0.00	0.02	0.02	16	0.01	0.01	0.01	16	0.01	0.02	0.01	14	2.01	1.29	0.30	14	0.01	0.02	0.02
	Derivatized - MS/MS non-kit	37	0.00	0.01	0.01	38	0.01	0.01	0.01	38	0.01	0.01	0.01	39	2.01	1.36	0.60	40	0.01	0.03	0.03
	Non-derivatized - MS/MS MassChrom® Chromsystems	21	0.00	0.01	0.02	21	0.01	0.01	0.01	21	0.01	0.00	0.01	18	2.01	1.32	1.28	21	0.01	0.02	0.03
	Non-derivatized - MS/MS NeoBase 2 Revvity	93	0.00	0.00	0.00	93	0.01	0.00	0.00	93	0.01	0.00	0.00	92	2.01	1.17	0.20	93	0.01	0.01	0.01
	Non-derivatized - MS/MS NeoBase Revvity	29	0.00	0.00	0.00	29	0.01	0.00	0.01	29	0.01	0.00	0.01	29	2.01	1.12	0.13	29	0.01	0.01	0.00
	Non-derivatized - MS/MS non-kit	17	0.00	0.01	0.01	17	0.01	0.01	0.01	17	0.01	0.01	0.01	17	2.01	1.38	0.80	17	0.01	0.01	0.01
	Non-derivatized Labsystems Neomass AAAC Plus	7	0.00	0.01	0.01	7	0.01	0.01	0.01	7	0.01	0.00	0.01	7	2.01	0.78	0.21	7	0.01	0.00	0.01
	Other	7	0.00	0.01	0.01	7	0.01	0.00	0.01	7	0.01	0.00	0.00	7	2.01	1.15	0.54	7	0.01	0.01	0.00

Note: EV = Expected Value, SD = Standard Deviation. Methods N < 3 not shown.

Newborn Screening Quality Assurance Program
Year: 2024, Quarter: 4
Mean Reported Concentrations Sorted by Method

Program: Amino Acids (AAPT)

		Specimen Number																			
		20244005001				20244005002				20244005003				20244005004				20244005005			
Analyte	**Method**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**
Arg (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	6	7.7	8.4	6.7	6	186.3	105.1	44.0	6	6.4	5.5	4.0	6	6.2	6.2	3.6	6	8.0	8.5	3.9
	Derivatized - MS/MS MassChrom® Chromsystems	14	7.7	9.2	2.3	16	186.3	147.6	30.7	15	6.4	7.3	5.1	16	6.2	14.2	21.4	16	8.0	11.6	3.2
	Derivatized - MS/MS non-kit	45	7.7	8.3	4.4	44	186.3	118.6	50.8	44	6.4	7.5	5.6	45	6.2	7.9	5.5	45	8.0	9.4	4.4
	LC-MS/MS non-kit	3	7.7	10.7	8.2	3	186.3	139.4	9.2	3	6.4	7.4	6.7	3	6.2	16.4	17.1	3	8.0	10.5	5.9
	Non-derivatized - MS/MS MassChrom® Chromsystems	21	7.7	8.3	2.6	23	186.3	169.7	52.7	21	6.4	8.4	5.7	23	6.2	10.0	6.7	23	8.0	12.3	4.1
	Non-derivatized - MS/MS NeoBase 2 Revvity	98	7.7	7.7	1.3	97	186.3	148.7	28.5	98	6.4	5.8	1.6	98	6.2	5.6	1.4	97	8.0	9.8	1.5
	Non-derivatized - MS/MS NeoBase Revvity	23	7.7	7.0	1.5	23	186.3	140.1	24.9	23	6.4	5.1	1.2	23	6.2	5.1	1.2	23	8.0	9.1	1.9
	Non-derivatized - MS/MS non-kit	17	7.7	8.0	1.9	17	186.3	140.0	35.8	17	6.4	8.0	5.1	17	6.2	6.1	1.9	17	8.0	10.4	3.2
	Non-derivatized Labsystems Neomass AAAC Plus	7	7.7	8.0	1.4	7	186.3	153.5	23.5	7	6.4	5.9	2.1	7	6.2	6.2	2.0	7	8.0	10.1	2.6
	Other	8	7.7	8.6	3.3	7	186.3	133.7	27.9	8	6.4	6.3	2.3	8	6.2	5.8	2.4	8	8.0	10.6	4.1
CRE	Derivatized - MS/MS non-kit	8	328.6	284.9	55.2	8	431.0	364.6	57.9	8	425.0	381.2	73.3	8	447.0	405.2	77.4	8	322.0	293.7	55.4
	Non-derivatized - MS/MS non-kit	3	328.6	302.5	14.7	3	431.0	410.9	19.6	3	425.0	419.9	29.1	3	447.0	424.0	40.2	3	322.0	310.2	26.0
Cit (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	6	5.9	7.0	0.5	5	10.6	14.4	1.1	6	10.8	13.0	3.4	6	162.6	187.6	13.3	6	6.0	9.4	6.5
	Derivatized - MS/MS MassChrom® Chromsystems	15	5.9	6.9	2.1	16	10.6	12.0	4.2	15	10.8	10.1	1.5	16	162.6	140.7	17.4	15	6.0	5.8	1.3
	Derivatized - MS/MS non-kit	48	5.9	5.8	2.5	47	10.6	10.7	3.8	48	10.8	9.8	2.8	48	162.6	135.1	34.0	48	6.0	6.0	2.3
	LC-MS/MS non-kit	3	5.9	8.3	2.4	3	10.6	13.1	3.4	.				3	162.6	140.7	15.0	3	6.0	9.2	6.8
	Non-derivatized - MS/MS MS2 Screening Neo (MS-Neo)Siemens	5	5.9	4.8	0.5	5	10.6	10.8	1.2	5	10.8	9.4	1.0	5	162.6	137.2	11.5	5	6.0	4.9	1.1
	Non-derivatized - MS/MS MassChrom® Chromsystems	23	5.9	5.4	1.8	23	10.6	12.2	2.2	23	10.8	9.8	1.7	23	162.6	146.1	22.7	23	6.0	6.4	1.9
	Non-derivatized - MS/MS NeoBase 2 Revvity	105	5.9	5.9	2.0	105	10.6	12.3	2.0	105	10.8	9.8	1.7	105	162.6	144.8	16.1	105	6.0	6.1	1.6
	Non-derivatized - MS/MS NeoBase Revvity	30	5.9	6.2	1.4	30	10.6	12.6	2.3	30	10.8	10.4	2.0	30	162.6	145.9	15.2	30	6.0	6.8	2.2
	Non-derivatized - MS/MS non-kit	23	5.9	5.7	1.4	23	10.6	11.8	2.6	23	10.8	10.2	1.8	23	162.6	145.1	22.8	23	6.0	6.1	2.2
	Non-derivatized Labsystems Neomass AAAC Plus	7	5.9	5.4	0.8	7	10.6	18.7	3.6	7	10.8	7.6	2.2	7	162.6	119.9	20.3	7	6.0	5.6	1.1

Note: EV = Expected Value, SD = Standard Deviation. Methods N < 3 not shown.

Newborn Screening Quality Assurance Program
Year: 2024, Quarter: 4
Mean Reported Concentrations Sorted by Method

Program: Amino Acids (AAPT)

		Specimen Number																			
		20244005001				20244005002				20244005003				20244005004				20244005005			
Analyte	**Method**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**
Cit (µmol/L blood)	Other	8	5.9	6.7	4.0	7	10.6	11.4	3.0	8	10.8	10.1	2.9	8	162.6	160.4	41.5	8	6.0	6.4	3.4
GUAC (µmol/L blood)	Derivatized - MS/MS non-kit	14	1.0	1.3	0.9	14	1.1	1.3	0.9	14	1.2	1.3	0.8	14	1.4	1.6	1.0	14	0.9	1.4	0.9
Leu (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	6	22.5	34.4	13.2	6	16.9	39.4	26.3	6	18.4	27.0	8.7	6	18.7	28.4	11.3	6	571.4	488.4	127.3
	Derivatized - MS/MS MassChrom® Chromsystems	15	22.5	34.3	14.8	16	16.9	30.2	16.6	16	18.4	29.0	15.7	16	18.7	25.8	12.2	16	571.4	432.3	66.0
	Derivatized - MS/MS non-kit	44	22.5	29.9	19.3	46	16.9	30.3	29.2	44	18.4	24.9	14.4	47	18.7	30.9	30.5	47	571.4	480.3	93.7
	LC-MS/MS non-kit	6	22.5	24.8	14.7	6	16.9	22.8	15.7	6	18.4	22.9	19.2	6	18.7	23.6	19.0	6	571.4	495.4	62.3
	Non-derivatized - MS/MS MS2 Screening Neo (MS-Neo)Siemens	5	22.5	23.7	2.4	5	16.9	17.4	2.6	5	18.4	17.9	2.9	5	18.7	18.5	2.9	5	571.4	493.2	62.1
	Non-derivatized - MS/MS MassChrom® Chromsystems	32	22.5	27.3	11.6	33	16.9	26.9	26.5	32	18.4	22.7	14.9	32	18.7	23.1	15.9	32	571.4	499.0	68.3
	Non-derivatized - MS/MS NeoBase 2 Revvity	111	22.5	27.5	8.3	110	16.9	21.5	5.4	111	18.4	21.6	5.1	111	18.7	21.8	5.2	110	571.4	485.3	57.9
	Non-derivatized - MS/MS NeoBase Revvity	31	22.5	27.5	3.7	31	16.9	22.2	2.9	31	18.4	21.8	2.9	31	18.7	21.7	3.2	31	571.4	520.8	56.9
	Non-derivatized - MS/MS non-kit	28	22.5	29.2	15.8	28	16.9	24.1	14.8	28	18.4	23.9	10.5	28	18.7	25.9	20.0	28	571.4	480.1	88.6
	Non-derivatized Labsystems Neomass AAAC Plus	7	22.5	24.9	12.5	7	16.9	19.6	11.4	7	18.4	19.2	10.6	7	18.7	19.0	10.8	7	571.4	432.1	79.9
	Other	14	22.5	45.1	26.7	14	16.9	38.7	28.2	12	18.4	28.3	17.6	14	18.7	42.0	36.5	14	571.4	542.3	85.7
Met (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	6	1.7	5.1	4.8	6	2.1	4.2	3.0	6	172.1	121.0	45.5	6	1.7	5.2	5.2	6	1.8	5.5	5.5
	Derivatized - MS/MS MassChrom® Chromsystems	16	1.7	3.6	4.3	15	2.1	3.9	5.2	16	172.1	120.9	27.9	16	1.7	2.4	2.8	16	1.8	3.0	3.2
	Derivatized - MS/MS non-kit	47	1.7	3.6	4.3	47	2.1	4.0	4.4	47	172.1	134.2	26.1	47	1.7	3.5	3.6	47	1.8	3.2	3.3
	LC-MS/MS non-kit	5	1.7	3.4	4.3	5	2.1	4.3	6.0	5	172.1	132.1	20.8	5	1.7	3.9	6.2	5	1.8	4.0	6.2
	Non-derivatized - MS/MS MS2 Screening Neo (MS-Neo)Siemens	5	1.7	2.3	0.6	5	2.1	2.5	0.6	5	172.1	138.9	14.4	5	1.7	2.2	0.6	5	1.8	2.3	0.5
	Non-derivatized - MS/MS MassChrom® Chromsystems	32	1.7	2.2	1.5	32	2.1	2.5	1.3	33	172.1	125.4	19.1	32	1.7	2.2	1.3	32	1.8	2.2	1.1
	Non-derivatized - MS/MS NeoBase 2 Revvity	108	1.7	1.8	0.9	108	2.1	2.0	0.7	108	172.1	123.6	15.2	107	1.7	1.8	0.6	108	1.8	1.7	0.5
	Non-derivatized - MS/MS NeoBase Revvity	31	1.7	2.1	0.7	31	2.1	2.3	0.7	31	172.1	132.1	15.9	31	1.7	2.5	0.6	31	1.8	2.3	1.3

Note: EV = Expected Value, SD = Standard Deviation. Methods N < 3 not shown.

Newborn Screening Quality Assurance Program
Year: 2024, Quarter: 4
Mean Reported Concentrations Sorted by Method

Program: Amino Acids (AAPT)

		Specimen Number																			
		20244005001				20244005002				20244005003				20244005004				20244005005			
Analyte	**Method**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**
Met (µmol/L blood)	Non-derivatized - MS/MS non-kit	27	1.7	3.2	4.5	27	2.1	2.5	2.2	28	172.1	135.3	27.5	27	1.7	2.2	2.3	28	1.8	3.1	4.7
	Non-derivatized Labsystems Neomass AAAC Plus	7	1.7	2.2	2.7	7	2.1	2.5	3.0	6	172.1	109.4	31.9	7	1.7	2.8	2.7	7	1.8	1.5	1.4
	Other	9	1.7	6.9	12.6	8	2.1	2.7	1.0	8	172.1	138.8	21.8	8	1.7	2.5	1.1	8	1.8	2.7	1.3
Phe (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	7	6.3	11.6	6.5	7	5.6	14.6	14.8	7	5.5	11.1	7.5	7	5.4	10.9	7.8	7	6.1	12.3	8.5
	Derivatized - MS/MS MassChrom® Chromsystems	17	6.3	13.0	10.7	17	5.6	9.9	8.3	17	5.5	9.1	5.8	17	5.4	10.4	11.3	17	6.1	9.0	5.2
	Derivatized - MS/MS non-kit	50	6.3	8.1	2.4	50	5.6	7.1	1.9	50	5.5	7.5	2.4	50	5.4	7.4	2.3	50	6.1	7.7	2.3
	High-performance liquid chromatography (HPLC) non-kit	3	6.3	15.5	8.5	3	5.6	21.6	15.0	3	5.5	12.8	9.6	3	5.4	16.8	10.8	3	6.1	16.1	8.5
	LC-MS/MS non-kit	6	6.3	11.1	7.6	6	5.6	10.6	7.5	6	5.5	10.9	7.9	6	5.4	10.6	7.9	6	6.1	22.0	34.4
	NeoLISA® Phe Interscientifica	3	6.3	19.3	4.7	3	5.6	17.8	5.6	3	5.5	33.3	7.9	3	5.4	38.3	24.5	3	6.1	72.7	36.8
	Neonatal Phe LabSystems	6	6.3	40.2	34.1	6	5.6	29.0	17.3	5	5.5	29.2	19.5	6	5.4	30.2	19.1	6	6.1	67.6	36.7
	Non-derivatized - MS/MS MS2 Screening Neo (MS-Neo)Siemens	5	6.3	7.2	0.7	5	5.6	6.3	0.8	5	5.5	6.3	0.7	5	5.4	6.5	0.4	5	6.1	7.2	0.9
	Non-derivatized - MS/MS MassChrom® Chromsystems	31	6.3	8.5	1.9	31	5.6	7.6	1.5	31	5.5	7.5	1.5	31	5.4	7.5	1.5	32	6.1	11.2	16.3
	Non-derivatized - MS/MS NeoBase 2 Revvity	113	6.3	7.2	3.2	114	5.6	6.6	5.2	114	5.5	6.2	2.2	114	5.4	6.1	2.2	114	6.1	6.8	2.1
	Non-derivatized - MS/MS NeoBase Revvity	31	6.3	8.3	1.5	31	5.6	7.1	1.2	31	5.5	7.3	1.5	31	5.4	7.0	1.3	31	6.1	8.0	3.1
	Non-derivatized - MS/MS non-kit	29	6.3	9.9	9.1	29	5.6	8.3	5.7	29	5.5	8.9	6.5	29	5.4	9.2	8.0	29	6.1	9.6	8.6
	Non-derivatized Labsystems Neomass AAAC Plus	8	6.3	6.6	4.8	8	5.6	6.5	4.0	8	5.5	6.0	3.8	8	5.4	5.7	3.7	8	6.1	6.0	3.2
	Other	21	6.3	18.1	20.1	21	5.6	15.5	17.9	22	5.5	17.3	19.7	21	5.4	17.1	20.5	22	6.1	43.3	42.2
	PHE GSP Neonatal Revvity	8	6.3	7.2	5.9	8	5.6	8.6	6.1	8	5.5	7.5	5.9	8	5.4	7.4	7.1	8	6.1	8.3	5.2
	PHE Neonatal Kit Revvity	13	6.3	17.2	13.5	13	5.6	16.6	9.8	13	5.5	16.5	10.1	13	5.4	20.9	15.5	13	6.1	25.8	24.0

Note: EV = Expected Value, SD = Standard Deviation. Methods N < 3 not shown.

Newborn Screening Quality Assurance Program
Year: 2024, Quarter: 4
Mean Reported Concentrations Sorted by Method

Program: Amino Acids (AAPT)

		Specimen Number																			
		20244005001				20244005002				20244005003				20244005004				20244005005			
Analyte	**Method**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**
SUAC (µmol/L blood)	Derivatized - MS/MS MassChrom® Chromsystems	13	0.2	0.6	0.4	13	0.2	0.5	0.4	13	0.2	0.6	0.4	13	0.3	0.6	0.5	13	0.2	0.6	0.4
	Derivatized - MS/MS non-kit	19	0.2	1.0	1.1	20	0.2	0.9	1.3	20	0.2	0.8	0.6	20	0.3	0.9	1.0	20	0.2	1.0	1.1
	Non-derivatized - MS/MS MassChrom® Chromsystems	21	0.2	0.7	0.3	21	0.2	0.8	0.4	21	0.2	0.8	0.4	21	0.3	0.8	0.4	21	0.2	0.7	0.3
	Non-derivatized - MS/MS NeoBase 2 Revvity	84	0.2	0.2	0.2	84	0.2	0.3	0.2	84	0.2	0.2	0.2	84	0.3	0.3	0.2	84	0.2	0.2	0.2
	Non-derivatized - MS/MS NeoBase Revvity	24	0.2	0.7	0.4	24	0.2	0.7	0.4	24	0.2	0.7	0.4	24	0.3	0.7	0.4	24	0.2	0.8	0.4
	Non-derivatized - MS/MS non-kit	15	0.2	0.7	0.5	15	0.2	0.7	0.5	15	0.2	0.7	0.5	15	0.3	0.8	0.6	15	0.2	0.7	0.5
Tyr (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	6	13.7	18.5	6.8	6	10.3	19.0	12.7	6	10.4	16.1	8.6	6	9.7	14.9	9.4	6	13.4	19.0	9.4
	Derivatized - MS/MS MassChrom® Chromsystems	17	13.7	16.0	4.1	17	10.3	11.5	2.3	17	10.4	12.4	2.4	17	9.7	11.6	2.5	17	13.4	16.0	3.3
	Derivatized - MS/MS non-kit	47	13.7	14.5	3.0	47	10.3	11.0	2.5	47	10.4	11.4	2.2	47	9.7	10.9	2.0	47	13.4	14.6	2.3
	LC-MS/MS non-kit	6	13.7	17.4	5.9	6	10.3	13.8	8.0	6	10.4	14.8	10.0	6	9.7	14.6	10.1	6	13.4	17.0	6.0
	Non-derivatized - MS/MS MS2 Screening Neo (MS-Neo)Siemens	5	13.7	13.9	1.1	5	10.3	10.2	0.8	5	10.4	10.6	1.0	5	9.7	9.9	0.7	5	13.4	13.5	1.2
	Non-derivatized - MS/MS MassChrom® Chromsystems	30	13.7	17.9	3.4	30	10.3	14.4	3.5	30	10.4	14.4	3.0	30	9.7	13.7	2.9	30	13.4	18.1	3.3
	Non-derivatized - MS/MS NeoBase 2 Revvity	110	13.7	16.5	3.4	110	10.3	12.3	2.2	110	10.4	12.4	2.3	110	9.7	12.1	2.7	110	13.4	15.9	2.2
	Non-derivatized - MS/MS NeoBase Revvity	31	13.7	18.0	3.2	31	10.3	13.3	2.4	31	10.4	13.6	2.7	31	9.7	12.6	2.3	31	13.4	17.5	5.3
	Non-derivatized - MS/MS non-kit	27	13.7	18.3	8.1	27	10.3	15.1	10.8	28	10.4	15.3	9.6	27	9.7	14.3	9.5	28	13.4	19.1	11.6
	Non-derivatized Labsystems Neomass AAAC Plus	7	13.7	13.5	2.5	7	10.3	9.8	4.4	7	10.4	10.6	4.0	7	9.7	9.5	4.1	7	13.4	13.2	3.4
	Other	8	13.7	17.5	4.0	8	10.3	11.9	1.2	8	10.4	12.1	1.6	8	9.7	11.1	1.4	8	13.4	15.6	1.3
Val (µmol/L blood)	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE	6	30.9	42.9	18.2	6	23.7	38.1	23.7	6	23.4	39.1	26.6	6	21.2	34.5	20.3	6	579.6	395.0	51.9
	Derivatized - MS/MS MassChrom® Chromsystems	16	30.9	36.4	12.4	16	23.7	30.0	14.7	15	23.4	26.3	10.3	16	21.2	23.4	7.0	16	579.6	383.8	76.9
	Derivatized - MS/MS non-kit	42	30.9	41.6	17.8	43	23.7	36.9	21.0	42	23.4	35.5	16.0	42	21.2	34.5	16.2	43	579.6	421.1	91.8
	LC-MS/MS non-kit	5	30.9	42.2	21.3	5	23.7	37.7	20.6	5	23.4	36.4	23.5	5	21.2	33.4	20.5	5	579.6	469.2	72.2
	Non-derivatized - MS/MS MS2 Screening Neo (MS-Neo)Siemens	5	30.9	35.5	2.4	5	23.7	26.5	2.2	5	23.4	27.0	1.5	5	21.2	26.1	1.0	5	579.6	507.1	62.1

Note: EV = Expected Value, SD = Standard Deviation. Methods N < 3 not shown.

Newborn Screening Quality Assurance Program
Year: 2024, Quarter: 4
Mean Reported Concentrations Sorted by Method

Program: Amino Acids (AAPT)

		Specimen Number																			
		20244005001				20244005002				20244005003				20244005004				20244005005			
Analyte	**Method**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**
Val (µmol/L blood)	Non-derivatized - MS/MS MassChrom® Chromsystems	23	30.9	29.8	4.3	23	23.7	23.8	4.1	23	23.4	23.4	3.9	23	21.2	21.9	3.8	24	579.6	422.9	91.4
	Non-derivatized - MS/MS NeoBase 2 Revvity	98	30.9	36.5	10.6	97	23.7	27.6	7.6	98	23.4	27.5	7.8	98	21.2	25.5	8.0	97	579.6	485.4	48.3
	Non-derivatized - MS/MS NeoBase Revvity	30	30.9	37.2	5.6	30	23.7	28.8	4.2	30	23.4	28.2	4.3	30	21.2	26.3	4.2	30	579.6	513.6	88.7
	Non-derivatized - MS/MS non-kit	22	30.9	31.6	4.9	23	23.7	26.5	11.4	23	23.4	27.6	12.9	23	21.2	25.2	10.9	23	579.6	415.3	60.9
	Non-derivatized Labsystems Neomass AAAC Plus	7	30.9	36.9	15.6	7	23.7	28.7	14.6	7	23.4	26.9	15.1	7	21.2	25.2	13.1	7	579.6	494.0	124.2
	Other	10	30.9	44.1	18.3	10	23.7	35.5	22.7	10	23.4	30.2	6.9	10	21.2	30.6	17.5	10	579.6	497.7	82.4

Note: EV = Expected Value, SD = Standard Deviation. Methods N < 3 not shown.

Newborn Screening Quality Assurance Program
Year: 2024, Quarter: 4
Mean Reported Concentrations Sorted by Method

Program: Hormones and Total Galactose (HORMPT)

		Specimen Number																			
		20244001001				20244001002				20244001003				20244001004				20244001005			
Analyte	**Method**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**
T4 (µg/dL serum)	NeoMAP® T4 Interscientifica	4	15.4	15.4	2.8	4	15.5	16.1	0.6	4	8.2	10.6	1.7	4	16.0	17.0	1.8	4	15.4	15.1	1.4
	Other	11	15.4	19.1	3.2	11	15.5	16.3	4.0	11	8.2	8.4	1.9	11	16.0	17.7	2.3	11	15.4	17.9	3.5
	T4 AutoDELFIA Neonatal Revvity	17	15.4	15.6	1.2	17	15.5	16.8	1.9	17	8.2	8.2	1.6	17	16.0	16.8	2.0	17	15.4	16.1	1.7
	T4 DELFIA Neonatal Revvity	8	15.4	16.4	4.2	8	15.5	17.3	5.8	8	8.2	7.7	1.4	7	16.0	15.3	2.0	8	15.4	17.8	4.6
	T4 GSP Neonatal Revvity	28	15.4	16.9	1.2	28	15.5	17.4	1.4	28	8.2	8.3	0.8	28	16.0	17.1	1.3	28	15.4	17.2	1.5
TSH (µIU/mL serum)	NeoMAP® TSH Interscientifica	4	1.4	1.3	0.3	4	1.5	1.4	0.2	3	91.6	104.5	12.5	4	1.2	1.2	0.1	4	1.4	1.3	0.1
	Neonatal TSH LabSystems	21	1.4	3.6	1.9	23	1.5	4.4	2.4	23	91.6	75.2	31.0	21	1.2	3.6	1.8	22	1.4	3.5	1.7
	Other	21	1.4	2.0	1.6	22	1.5	2.8	2.1	22	91.6	78.4	28.0	21	1.2	2.3	1.8	20	1.4	2.3	1.9
	Trimaris Neonatal TSH FEIA	7	1.4	2.2	1.3	7	1.5	2.2	1.8	7	91.6	74.1	4.1	7	1.2	2.1	1.6	7	1.4	2.7	1.3
	ZenTech ELISA Neonatal TSH	16	1.4	1.8	1.5	16	1.5	2.3	1.8	16	91.6	52.8	31.4	16	1.2	2.1	1.6	16	1.4	3.2	2.3
	hTSH AutoDELFIA Neonatal Revvity	63	1.4	0.9	0.7	64	1.5	0.9	0.7	64	91.6	85.5	14.7	63	1.2	0.6	0.6	63	1.4	0.8	0.6
	hTSH DELFIA Neonatal Revvity	60	1.4	1.5	1.3	61	1.5	1.8	2.1	61	91.6	79.7	21.2	61	1.2	1.3	1.1	61	1.4	1.6	1.5
	hTSH GSP Neonatal Revvity	124	1.4	1.3	0.5	123	1.5	1.3	0.6	130	91.6	81.3	14.3	124	1.2	1.1	0.6	124	1.4	1.1	0.6
17OHP (ng/mL serum)	17OHP AutoDELFIA Neonatal Revvity	61	86.3	100.6	16.2	60	0.9	1.3	0.4	60	0.9	0.6	0.4	60	0.9	1.4	0.4	60	0.4	0.7	0.4
	17OHP DELFIA Neonatal Revvity	45	86.3	93.2	21.3	47	0.9	1.4	0.6	47	0.9	0.9	0.5	47	0.9	1.8	2.3	46	0.4	0.7	0.5
	17OHP GSP Neonatal Revvity	107	86.3	90.6	14.2	101	0.9	1.1	0.5	102	0.9	0.9	1.0	101	0.9	1.1	0.4	102	0.4	0.6	0.9
	LC-MS/MS non-kit	5	86.3	79.9	26.8	5	0.9	1.4	1.0	5	0.9	1.2	1.2	5	0.9	1.2	1.0	5	0.4	1.1	1.1
	NeoMAP® 17OHP Interscientifica	3	86.3	88.5	59.9	4	0.9	2.0	0.2	4	0.9	1.1	0.5	4	0.9	2.2	0.5	4	0.4	1.1	0.5
	Neonatal 17OHP LabSystems	16	86.3	94.7	47.8	18	0.9	2.7	2.2	18	0.9	1.5	1.3	18	0.9	3.0	3.2	17	0.4	1.1	1.2
	Other	19	86.3	93.4	25.9	20	0.9	4.6	6.6	18	0.9	2.1	2.3	19	0.9	3.6	4.7	21	0.4	4.2	6.6
	ZenTech ELISA Neonatal 17OHP	9	86.3	98.2	32.3	12	0.9	4.6	3.8	10	0.9	2.8	1.5	12	0.9	5.2	5.6	12	0.4	4.2	5.4

Note: EV = Expected Value, SD = Standard Deviation. Methods N < 3 not shown.

Newborn Screening Quality Assurance Program
Year: 2024, Quarter: 4
Mean Reported Concentrations Sorted by Method

Program: Hormones and Total Galactose (HORMPT)

		Specimen Number																			
		20244001001				20244001002				20244001003				20244001004				20244001005			
Analyte	**Method**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**
TGal (mg/dL blood)	50hr Reagent Kit Spotcheck® TGal Astoria-Pacific	4	0.0	1.6	1.0	4	0.0	1.4	1.1	4	0.9	1.4	1.0	4	25.0	23.1	3.9	4	0.0	1.9	1.1
	Colorimetric -non-kit method	4	0.0	1.3	2.2	4	0.0	1.4	2.0	4	0.9	1.7	2.1	4	25.0	39.6	9.3	4	0.0	1.8	1.8
	Fluorometric manual TGal - non-kit	4	0.0	2.4	1.7	4	0.0	2.9	1.5	4	0.9	2.7	1.8	5	25.0	26.3	7.1	4	0.0	2.6	1.7
	GSP TGal Neonatal Revvity	64	0.0	0.6	0.6	64	0.0	0.6	0.6	66	0.9	0.8	1.0	67	25.0	23.9	3.2	65	0.0	1.0	3.3
	NeoLISA® TGal Interscientifica	4	0.0	1.8	0.1	4	0.0	1.8	0.2	4	0.9	2.0	0.2	4	25.0	16.4	1.4	4	0.0	1.7	0.1
	Other	23	0.0	1.8	2.4	23	0.0	1.9	2.3	23	0.9	1.5	2.0	22	25.0	22.7	10.5	23	0.0	1.8	2.7
	TGAL Flourescence Neonatal Revvity	44	0.0	0.8	1.0	44	0.0	0.7	0.8	44	0.9	1.3	1.4	44	25.0	18.4	2.7	44	0.0	0.8	1.0
	ZenTech Neonatal TGal Enzymatic Colorimetric	23	0.0	3.7	2.0	23	0.0	3.6	1.7	23	0.9	4.2	2.1	23	25.0	20.0	3.2	23	0.0	3.7	1.9

Note: EV = Expected Value, SD = Standard Deviation. Methods N < 3 not shown.

Newborn Screening Quality Assurance Program
Year: 2024, Quarter: 4
Mean Reported Concentrations Sorted by Method

Program: Immunoreactive Trypsinogen (IRTPT)

		Specimen Number																			
		20244008001				20244008002				20244008003				20244008004				20244008005			
Analyte	**Method**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**	**N**	**EV**	**Mean**	**SD**
IRT (ng/mL blood)	DELFIA® Neonatal IRT	35	249.6	217.2	30.4	36	10.5	11.7	3.1	36	5.5	5.2	2.9	36	14.0	11.8	4.8	36	133.8	114.9	35.5
	FEIA IRT Labsystems	13	249.6	252.7	70.6	13	10.5	14.5	4.7	12	5.5	11.0	3.6	13	14.0	18.7	5.5	13	133.8	157.5	59.3
	IRT AutoDELFIA Neonatal Revvity	54	249.6	245.3	27.5	53	10.5	10.8	1.7	53	5.5	5.6	1.5	53	14.0	13.7	2.2	54	133.8	139.7	18.1
	IRT GSP Neonatal Revvity	99	249.6	262.3	27.8	98	10.5	11.1	1.7	94	5.5	6.9	1.7	98	14.0	14.5	3.2	99	133.8	140.6	15.9
	NeoMAP® IRT Interscientifica	4	249.6	109.5	36.6	4	10.5	21.8	5.9	4	5.5	11.7	2.3	4	14.0	28.9	7.4	4	133.8	104.8	24.8
	Other	14	249.6	236.4	91.3	13	10.5	15.3	6.1	13	5.5	9.8	4.7	13	14.0	19.5	5.6	13	133.8	160.0	45.9
	ZenTech ELISA Neonatal IRT	16	249.6	151.8	46.8	16	10.5	17.4	7.1	15	5.5	11.3	5.1	16	14.0	22.4	9.1	15	133.8	147.4	48.7

Note: EV = Expected Value, SD = Standard Deviation. Methods N < 3 not shown.

This *NEWBORN SCREENING QUALITY ASSURANCE PROGRAM* report is an internal publication distributed to program participants and selected program colleagues. The laboratory quality assurance program is a project cosponsored by the Centers for Disease Control and Prevention (CDC) and the Association of Public Health Laboratories.

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