

Reporting Title: CAH Profile 6

Performing Location: Esoterix Endocrinology

Specimen Requirements:

Specimen Type: Serum

Container/Tube: Red

Specimen Volume: 3.5 mL

Collection Instructions: Draw blood in a plain, red-top tube(s). (Serum gel tube is not acceptable.) Spin down and separate within 45 minutes of collection and send 3.5 mL of serum frozen in plastic vial.

Specimen Minimum Volume:

2 mL NOTE: Minimum volume does not allow for repeat analysis.

Specimen Type	Temperature	Time	Special Container
Serum Red	Frozen	90 days	

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
Z5043	Cortisol	Alphanumeric		2143-6
Z5044	Deoxycorticosterone (DOC)	Alphanumeric		1656-8
Z5045	11-Desoxycortisol	Alphanumeric		1657-6
Z5046	Dehydroepiandrosterone (DHEA)	Alphanumeric		2193-1
Z5047	17-OH Pregnenolone	Alphanumeric		6765-2
Z5048	Progesterone	Alphanumeric		2839-9
Z5049	17-Alpha-Hydroxyprogesterone 17-OHP	Alphanumeric		1668-3
Z5050	Androstenedione	Alphanumeric		1854-9
Z5051	Testosterone, Total	Alphanumeric		2986-8

LOINC and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

CPT Code Information:

82633/DOC

82634/ 11-Desoxycortisol
 82157/Androstenedione
 82533/Cortisol
 82626/DHEA
 84143/17-OH-Pregnenolone
 84144/Progesterone
 83498/17-OH-Progesterone
 84403/Testosterone

Reference Values:

Androstenedione	Â
Units:Â ng/dL	Â
AgeÂ Â Â Â Â Â Â Â Â Â Â Â Â	Range
Premature (26-28w) Day 4Â Â Â	63 - 935
Premature (31-35w) Day 4Â Â Â	50 - 449
Full Term (1-7 days)Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â	<10 - 279
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Levels decrease rapidly to after one week.	
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1 - 11m	<10 - 37
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Androstenedione gradually decreases during the first six months to prepubertal levels.	
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Prepubertal ChildrenÂ Â Â Â Â Â Â	<10 - 17
Adult MalesÂ Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â	44 - 186
Adult FemalesÂ Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â	28 - 230
Females PostmenopausalÂ Â Â Â Â Â Â Â Â	<10-93

Cortisol	Â
Units:Â ug/dL	Â
Age	Range
Premature (26-28w) Day 4Â Â Â Â	1.0 - 11

Premature (31-35w) Day 4	2.5 - 9.1
Full Term Day 3	1.7 - 14
Full Term Day 7	2.0 - 11
31d - 11m	2.8 - 23
12m - 15y (8:00 AM)	3.0 - 21
Â	Â
Adults	Â
8:00 AM	8.0 - 19
4:00 PM	4.0 - 11

Deoxycorticosterone (DOC)	Â
Units: ng/dL	Â
Age	Range
Premature (26 - 28w) Day 4	20 - 105
Premature (34 - 36w) Day 4	28 - 78
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Newborn:Â Levels are markedly elevated at birth and decrease rapidly during the first week to the range of 7 - 49 as found in older infants.	
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1 - 11m	7 - 49
Prepubertal Children Â	2 - 34
Pubertal Children and Adults 8:00 AM	2 - 19

Dehydroepiandrosterone (DHEA)	
Units: ng/dL	Â
Age	Range
Premature (26 - 31w)Â	82 - 1484
Premature (32 - 35w)	56 - 1853
Full Term (2 - 7d)	41 - 1292
8d - 5m	<948

6 - 12m	<136
1 - 5 y	<68
6 - 7 y	<111
8 - 10 y	<186
11 - 12 y	<202
13 - 14 y	<319
15 - 16 y	39 - 481
17 - 19 y	40 - 491
20 - 50 y	31 - 701
> 50 y	21 - 402

11-Desoxycortisol	Â
Units:Â ng/dL	Â
Age	Range
Premature (26-28w) Day 4	110 - 1376
Premature (31-35w) Day 4	48 - 579
Newborn Day 3Â Â Â	13 - 147
1 - 11m	<10 - 156
Prepubertal 8:00 AMÂ Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â	20 - 155
Pubertal Children and Adults 8:00 AMÂ Â Â Â Â Â Â Â Â Â	12 - 158

17-OH Pregnenolone	Â
Units:Â ng/dL	Â
Age	Range
Premature (26-28w) Day 4	375 - 3559
Premature (31-35w) Day 4	64 - 2380
3 Days	10 - 829
1 - 5m	36 - 763
6 - 11m	42 - 540
12 - 23m	14 - 207

24mÂ - 5y	10 - 103
6 - 9y	10 - 186
Pubertal	44 - 235
Adults	53 - 357

Progesterone	Â
Units:Â ng/dL	Â
Males	Â
Age	RangeÂ Â
1 - 16y	<10 - 15
Adults Â	<10 - 11
Â	Â
Females	Â
Age	RangeÂ Â
1-10y	<10 - 26
11y	<10 - 255
12yÂ Â	<10 - 856
13y	<10 - 693
14y	<10 - 1204
15y	<10 - 1076
16y	<10 - 1294
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Adult	Â
Cycle Days	Range
1 - 6	<10 - 17
7 - 12	<10 - 135
13 - 15	<10 - 1563
16 - 28	<10 - 2555
Post Menopausal	<10
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Note: Luteal progesterone peaked from 350 to 3750 ng/dL on days ranging from 17 to 23.	

17-Alpha-Hydroxyprogesterone 17-OHP	Â
Units:Â ng/dLÂ Â Â	Â
Age	RangeÂ Â Â Â Â Â Â Â Â Â Â Â Â
Premature (26-28w) Day 4	124 - 841
Premature (31-35w) Day 4	26 - 568
Full-Term Day 3	<78
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Males: Levels increase after the first week to peak values ranging from 40 - 200 between 30 and 60 days. Values then decline to a prepubertal value of one year.	
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PrepubertalÂ Â Â Â Â Â Â Â Â Â Â Â	<91
Adult MalesÂ Â Â Â Â Â Â Â Â Â Â Â Â	27 - 199
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Females	Â
1 - 11m	13 - 106
Prepubertal	<91
Adult Females	Â
FollicularÂ Â Â Â Â Â Â Â Â Â Â Â	15-70
LutealÂ Â Â Â Â Â Â Â Â Â Â Â Â	35-290

Testosterone, Total	Â	Â
Units:Â ng/dLÂ Â Â Â Â Â	Â	Â
Age	Range	Â
MalesÂ Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â	Â	Â
Premature (26-28w) Day 4 Â	59 - 125	Â
Premature (31-35w) Day 4	37 - 198	Â
Newborns	75 - 400	Â
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1 - 7m:Â Levels decrease rapidly the first week to 20 - 50, then increase to 60 - 400 between 20 - 60 days. Levels then decline to prepubertal range levels of 10 by seven months.		
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Females	Â	Â
Premature (26 - 28w) Day 4	5 - 16	Â
Premature (31 - 35w) Day 4	5 - 22	Â
Newborns	20 - 64	Â
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1 - 7m: Levels decrease during the first month to less than 10 and remain there until puberty.		
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Prepubertal Males and FemalesÂ Â Â	<2.5 - 10	Â
Adult MalesÂ >18 yearsÂ Â Â Â Â Â Â Â Â Â Â Â Â Â Â	264 - 916	Â
Adult Females	Â	Â
Premenopausal	10 - 55	Â
Postmenopausal	7 - 40	Â
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Males	Â	Â
Tanner StageÂ Â Â Â Â Â Â Â Â Â	Age (years)Â Â Â Â Â Â Â Â Â Â Â	Male
1	<9.8Â Â Â Â Â Â Â Â Â Â Â	<2.5 - 10
2	9.8 - 14.5Â Â Â Â Â	18 - 150
3	10.7 - 15.4Â Â Â Â Â	100 - 320
4	11.8 - 16.2Â Â Â Â Â	200 - 620
5	12.8 - 17.3Â Â Â Â Â	350 - 970
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Females	Â	Â
Tanner StageÂ Â Â Â Â Â Â Â Â	Age (years)Â Â Â Â Â Â Â Â Â	Female
1	<9.2Â Â Â Â Â Â Â Â Â	<2.5 - 10
2	9.2 - 13.7Â Â Â Â Â Â	7 - 28
3	10.0 - 14.4Â Â Â Â Â Â	15 - 35
4	10.7 - 15.6Â Â Â Â Â Â	13 - 32
5	11.8 - 18.6Â Â Â Â Â Â	20 - 38