

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 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

Units: ng/dL

Age	Range
Premature (26-28w) Day 4	63 - 935
Premature (31-35w) Day 4	50 - 449
Full Term (1-7 days)	<10 - 279

Levels decrease rapidly to <52 ng/dL after one week.

1 - 11m	<10 - 37
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Androstenedione gradually decreases during the first six months to prepubertal levels.

Prepubertal Children	<10 - 17
Adult Males	44 - 186
Adult Females	28 - 230
Females Postmenopausal	<10-93

Cortisol

Units: ug/dL

Age	Range
Premature (26-28w) Day 4	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

Adults	
8:00 AM	8.0 - 19
4:00 PM	4.0 - 11

Deoxycorticosterone (DOC)

Units: ng/dL

Age	Range
Premature (26 - 28w) Day 4	20 - 105
Premature (34 - 36w) Day 4	28 - 78

Newborn: Levels are markedly elevated at birth and decrease rapidly during the first week to the range of 7 - 49 as found in older infants.

1 - 11m	7 - 49
Prepubertal Children	2 - 34
Pubertal Children and Adults	2 - 19
8:00 AM	

Dehydroepiandrosterone (DHEA)

Units: ng/dL

Age	Range
Premature (26 - 31w)	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

Units: ng/dL

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

17-OH Pregnenolone

Units: ng/dL

<u>Age</u>	<u>Range</u>
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
24m - 5y	10 - 103
6 - 9y	10 - 186
Pubertal	44 - 235
Adults	53 - 357

Progesterone

Units: ng/dL

Males

<u>Age</u>	<u>Range</u>
1 - 16y	<10 - 15
Adults	<10 - 11

Females

<u>Age</u>	<u>Range</u>
1-10y	<10 - 26
11y	<10 - 255
12y	<10 - 856
13y	<10 - 693
14y	<10 - 1204
15y	<10 - 1076
16y	<10 -1294

Adult

<u>Cycle Days</u>	<u>Range</u>
1 - 6	<10 - 17
7 - 12	<10 - 135
13 - 15	<10 - 1563
16 - 28	<10 - 2555
Post Menopausal	<10

Note: Luteal progesterone peaked from 350 to 3750 ng/dL on days ranging from 17 to 23.

17-Alpha-Hydroxyprogesterone

17-OHP

Units: ng/dL

Age	Range
Premature (26-28w) Day 4	124 - 841
Premature (31-35w) Day 4	26 - 568
Full-Term Day 3	<78

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 <91 before one year.

Prepubertal	<91
Adult Males	27 - 199

Females

1 - 11m	13 - 106
Prepubertal	<91

Adult Females

Follicular	15-70
Luteal	35-290

Testosterone, Total

Units: ng/dL

Age	Range
Males	
Premature (26-28w) Day 4	59 - 125
Premature (31-35w) Day 4	37 - 198
Newborns	75 - 400

1 - 7m: 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 <2.5 - 10 by seven months.

Females

Premature (26 - 28w) Day 4	5 - 16
Premature (31 - 35w) Day 4	5 - 22
Newborns	20 - 64

1 - 7m: Levels decrease during the first month to less than 10 and remain there until puberty.

Prepubertal Males and Females	<2.5 - 10
Adult Males >18 years	264 - 916
<u>Adult Females</u>	
Premenopausal	10 - 55
Postmenopausal	7 - 40

Males		
Tanner Stage	Age (years)	Male
1	<9.8	<2.5 - 10
2	9.8 - 14.5	18 - 150
3	10.7 - 15.4	100 - 320
4	11.8 - 16.2	200 - 620
5	12.8 - 17.3	350 - 970

Females		
Tanner Stage	Age (years)	Female
1	<9.2	<2.5 - 10
2	9.2 - 13.7	7 - 28
3	10.0 - 14.4	15 - 35
4	10.7 - 15.6	13 - 32
5	11.8 - 18.6	20 - 38