

**Reporting Title:** Estrone, S  
**Performing Location:** Rochester

**Specimen Requirements:**

Collection Container/Tube: Red top

Submission Container/Tube: Plastic vial

Specimen Volume: 1.2 mL

Collection Instructions:

1. Centrifuge and remove serum from red blood cells within 2 hours of draw.
2. Aliquot serum to submission container.

Additional Information: For more information see Steroid Pathways.

**Specimen Minimum Volume:**

0.8 mL

Specimen Type	Temperature	Time	Special Container
Serum Red	Refrigerated (preferred)	28 days	
	Ambient	28 days	
	Frozen	28 days	

**Result Codes:**

Result ID	Reporting Name	Type	Unit	LOINC®
81418	Estrone, S	Numeric	pg/mL	2258-2

LOINC and CPT codes are provided by the performing laboratory.

**Supplemental Report:**

No

**CPT Code Information:**

82679

**Reference Values:****CHILDREN\***

1-14 days: Estrone levels in newborns are very elevated at birth but will fall to prepubertal levels within a few days.

**Males**

Tanner Stages#	Mean Age	Reference Range
Stage I (>14 days and prepubertal)	7.1 years	Undetectable-16 pg/mL
Stage II	11.5 years	Undetectable-22 pg/mL
Stage III	13.6 years	10-25 pg/mL
Stage IV	15.1 years	10-46 pg/mL
Stage V	18 years	10-60 pg/mL

#Puberty onset (transition from Tanner stage I to Tanner stage II) occurs for boys at a median age of 11.5 (+/- 2) years. For boys there is no proven relationship between puberty onset and body weight or ethnic origin. Progression through Tanner stages is variable. Tanner stage V (adult) should be reached by age 18.

**Females**

Tanner Stages#	Mean Age	Reference Range
Stage I (>14 days and prepubertal)	7.1 years	Undetectable-29 pg/mL
Stage II	10.5 years	10-33 pg/mL
Stage III	11.6 years	15-43 pg/mL
Stage IV	12.3 years	16-77 pg/mL
Stage V	14.5 years	17-200 pg/mL

#Puberty onset (transition from Tanner stage I to Tanner stage II) occurs for girls at a median age of 10.5 (+/- 2) years. There is evidence that it may occur up to 1 year earlier in obese girls and in African American girls. Progression through Tanner stages is variable. Tanner stage V (adult) should be reached by age 18.

\*The reference ranges for children are based on the published literature(1,2), cross-correlation of our assay with assays used to generate the literature data and on our data for young adults.

**ADULTS**

Males: 10-60 pg/mL

Females

Premenopausal: 17-200 pg/mL

Postmenopausal: 7-40 pg/mL

Conversion factor

E1: pg/mL x 3.704=pmol/L (molecular weight=270)

For SI unit Reference Values, see <https://www.mayocliniclabs.com/order-tests/si-unit-conversion.html>