

Acceptable Tube Types



## Estradiol

<b>Alternate Name:</b>	None
<b>Performing Lab:</b>	New Hanover
<b>Specimen Container:</b>	Red, tiger, or yellow separator tube
<b>Minimum Volume Required:</b>	2 mL whole blood
<b>Testing Availability</b>	<b>Routine:</b> 24 hours/day <b>Stat:</b> Yes
<b>Turnaround Time:</b>	Routine: 4 hours Stat: < 1 hour
<b>Special Handling:</b>	None
<b>Patient Preparation:</b>	None
<b>Specimen Stability:</b>	
<b>Reference Range:</b>	<b>Male:</b> <11.8 – 52 pg/mL
	<b>Menstruating females (by day of cycle relative to LH peak):</b>
	Follicular phase (-12 to – 4 days): 19.5-144.2 pg/mL
	Midcycle (-3 to +2 days): 63.9-356.7 pg/mL
	Luteal phase (+4 to +12 days): 55.8-214.2 pg/mL
	Postmenopausal (No Hormone Replacement Therapy): <11.8 – 32.2 pg/mL
<b>Critical Value:</b>	None
<b>CPT Code:</b>	82670
<b>HED Test Group:</b>	Test Group – LAB at NH site
<b>HED Test Name:</b>	Test Name - Estradiol

**Testing Methodology:**

Competitive Immunoassay using  
Direct Chemiluminescent technology

**Causes for Specimen Rejection:**

Improper labeling

**Other Comments:****Clinical Significance:**

Measuring the circulating levels of estradiol is important for assessing the ovarian function and monitoring follicular development for assisted reproduction protocols. Estradiol plays an essential role throughout the human menstrual cycle. Elevated estradiol levels in females may also result from primary or secondary ovarian hyperfunction. Very high estradiol levels are found during the induction of ovulation for assisted reproduction therapy or in pregnancy. Decreased estradiol levels in females may result from either lack of ovarian synthesis (primary ovarian hypofunction and menopause) or a lesion in the hypothalamus-pituitary axis (secondary ovarian hypofunction). Elevated estradiol levels in males may be due to increased aromatization of androgens, resulting in gynecomastia.